

Next month UNESCO meets in general conference in Sofia to finalize a new two-year programme. David Dickson reports from Paris on the agreement that could safeguard Britain's contribution to the organization (page 10)

Painter of paradise: the work of CECIL COLLINS remains still little known in England, yet he is perhaps the most important mystic artist since Blake (page 12)

Entrepreneurial education: Adriana Caudroy looks at Cranfield's SMALL BUSINESS idea competition (page 12) ... while Hilary Macartney describes the achievement of the DESIGN DEVELOPMENT unit at Middlesex Polytechnic (page 16)

After strange gods: on the centenary of his birth, how does D. H. LAWRENCE's reputation stand up? Ronald Draper examines the search for wholeness and the novelist's "tentative success" (page 13)

Student loans seem to have slipped from the political agenda but the wider question of STUDENT SUPPORT remains central. Now is the time, Rupert Bristow argues, for a complete overhaul of the system (page 15)



Able was I ere I saw Elba ... Mark Kishlansky reviews Geoffrey Elton's study of the legal historian F. W. MAITLAND, first in a series of "palindromic" books "Historians on Historians" which matches ancients and moderns (page 17)

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18th century division of labour

"Bookends": Fernand Braudel
H. T. Dickinson on Horace

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Pre-election paralysis

According to the weathermen the summer may never have begun but it is well over according to the politicians' calendar. After almost two months of grateful silence the new political season got under way this week. On Monday Mrs Thatcher announced her long anticipated reshuffle. The Trades Union Congress has been meeting all week in Blackpool. Soon it will be time once more for the party conferences. The Social Democrats gather tomorrow in Torquay; the Liberal Party assembly is held the following week in Dundee; then Labour meets in Bournemouth, the process culminating (if that is the right word) with the Conservative Party conference back in Blackpool in October. Then as the summer-that-never-was finally sinks into the greying seas of Britain's political resorts, ministers and would-be ministers, oppositions and rival oppositions will flock back to Westminster, and the television and radio studios, for a hard winter's politicking.

Or rather two winter's of politicking, or even three if the Government's ratings in the opinion polls do not improve because Mrs Thatcher does not need to call a general election before the middle of 1988. We are entering, or rather we entered on the day after the Brecon by-election at the beginning of this awful summer, an extended pre-election period.

Much of the intensive speculation with which we will be assailed by politicians and the media over the coming months will focus on what will happen at the next general election in the autumn of 1987 or the spring of 1988. As the chances of Mrs Thatcher winning a third term of office dribble away, British politics will be gripped by a fascinating uncertainty as Labour's recovery sufficiently solid to propel Mr Kinnock into 10 Downing Street, so restoring that comfortable pattern of oscillation between Government and Opposition? Or will the Alliance find itself a real power broker at last?

But among all this speculation little attention will be paid to a much more important question, what happens between now and the general election? After all it could be almost three years. Yet the political initiatives that will fill that lengthy period, the speeches by ministers, the White Papers and other announcements, will be assessed almost exclusively in this one-dimensional perspective; what will their impact be on the relative prospects for the parties in the coming election.

Of course party politics are at the heart of democracy. They provide the context in which governments are held to account, alternative programmes of political action are developed, and the choice of the people is exercised. So even the tidiest and most arrogant administrators should resist the natural temptation to disparage their impact on the machinery of government, especially at a time when that instinc-

tual consensus of the good and the great has expired. Yet modern government is a complex business. The activity of the state, and so the influence of politics, touch all our institutions, hospitals, universities, railways.

The complexity and the pervasiveness of modern government mean that it cannot be put "on hold" while frothy pre-election battles are fought out. Although ultimately they may be the same, the greater threat posed by the present pre-election hiatus is not the political uncertainty about the identity of the victors in a general election two or three years away, but the political uncertainty that will infect the work of departments of state during that period, the creeping administrative paralysis that will progressively overcome them all.

In the particular case of higher education and the Department of Education and Science this uncertainty and this paralysis are already obvious. The dilemma that has faced successive ministers at the DES in relation to universities and polytechnics since 1979 can be simply expressed. They have had to develop positive policies that face up to the consequences of the public expenditure restrictions that have been imposed by the political force majeure of the Cabinet and the Treasury. Under the Carlisle-Boyson regime at the DES this dilemma was not even recognized. The events of 1981, particularly the university cuts announced in July, and the arrival of Sir Keith Joseph and Mr William Walgrave led to a significant improvement. The universities' restructuring fund, the "new blood" programme, and the creation of the National Advisory Body showed that the DES now recognized its obligation to develop positive policies.

Sadly, and probably through no fault of ministers at the DES, that improvement has not been sustained. The real tragedy of the Green Paper was not its rather abrasive language and its rhetorical priorities; it was the evidence it uncovered of the incapacity to develop those positive policies that are now urgently required as the malignant consequences of sustained cuts in public expenditure remorselessly accumulate. The Green Paper simply sets out an agenda of desirable priorities, or disreputable prejudices depending on one's view, that take no solid account of the actual circumstances of higher education. The simplest example is that the DES continues to encourage a twofold (cheaper) arts and social science places to (more expensive) places in sciences and technology. Yet it makes no real attempt to relate this policy to the pattern of dwindling resources - beyond monotonously muttering "Jerratt" as a kind of voodoo spell.

Despite the pre-election hiatus, the steam roller of the Government's public expenditure policy, which is a vital

component of the macro-economic policy that is at the heart of the Conservative programme, continues its advance. The Treasury's Chief Secretary may be changed but the PESC process grinds on. It is here more than ever that higher education policy is being made, in the Treasury with the DES almost a spectator.

Indeed the bargaining position of the DES may even be weakened by the gathering pre-election climate. Its civil servants have been trying for some time to persuade their ministers, and through them the Treasury, to allow some forward expenditure plans to be expressed in volume rather than cash terms, to enable institutions to develop credible plans. But what appears at an administrative level a modest and overdue proposal is all too likely to appear at the political level a dangerous precedent, a breach of the higher economic faith, a U-turn even. In the intensified politics of a pre-election period these will be decisively conservative arguments. Nor is the DES likely to have any success in securing special ameliorative programmes that mitigate the worst effects of the general cuts, the main device on which it relied between 1981 and 1984. The DES has not even bothered to bid for more "new blood" this year. In future any special programmes will be run by Lord Young's employment empire.

Two further factors will make it even more difficult for the DES to develop considered policies to match the attrition of resources. First, there can be no guarantee that even the minimal assurance of a regular reduction in the grant on the basis of which the University Grants Committee is encouraging universities to plan can be honoured. With growing competition from other claimants for public expenditure with more political clout higher education, and perhaps particularly the universities, may become the random victims of compensatory "adjustments". Second, in a pre-election period ministers instinctively recoil from policies that carry with them political liabilities, such as too definite forecasts of the demand for higher education that produce disappointed teenagers and angry parents or too detailed guidance on rationalization and closures that alarm back-bench MPs in marginal constituencies.

So the political season that is just opening may be one of great confusion. On the one hand the anxiety of Conservative "wets" about cuts in higher education and elsewhere will be more forcefully articulated, while the promise of a last-minute rescue by Mr Kinnock or the two Davids will shimmer seductively on the far political horizon. But on the other hand the remorseless attrition of the cuts will be compounded by the creeping paralysis of government. Higher education may have more to fear from the latter than from the former.

The reform of the UGC

The Lindop committee on validation in the non-university sector of higher education having bitten off rather more than ministers wished to chew, the Department of Education and Science is probably anxious to restrict the territory to be explored by the committee of inquiry into the University Grants Committee under the chairmanship of Lord Croom. Nevertheless there are two sharply contrasted approaches which the Croom committee can take - or rather which Sir Keith Joseph can preordain for the committee in its terms of reference.

The first is a minimalist approach. It consists of accepting the UGC very much as it is and suppressing any rising doubts about the appropriateness of the political technology on which the UGC depends. The task of Croom then would be to give a series of detailed recommendations about the working of the UGC. These would cover the selection of its members and the composition of its secretariat. A

first approach is to attempt a modest and maybe surreptitious nationalization of the UGC. This would require the Croom committee to consider the case for a "representative" membership and an entirely non-civil service secretariat. Under either version of this first approach Croom will need to consider the proselytizing (on behalf of government) and propagandizing (on behalf of universities) role of the UGC.

The second is a root-and-branch approach. It consists of returning to first principles, an analysis of the real relationship between the universities, the UGC and the DES in 1985 not the dignified but dishonest relationship which so many people for different reasons pretend to recognize. On the basis of such a clear-headed analysis the Croom committee could then proceed to design a new UGC. Inevitably it would be a different breed of administrative animal.

Ministers, and their civil servants,

it seems so much more sensible, and so much safer. A return to first principles might lead to awkward questions about effective co-ordination between the university and local authority areas and strip away some of the DES's alibis. But the Croom committee should resist terms of reference that are too restrictive. Lindop may have gone too far; the embryonic danger with Croom is that it will not go far enough.

This new committee must be able at least to consider the crucial issue of whether the UGC should now be placed on a proper statutory footing. The UGC is at the heart of the relationship between universities and the state, a relationship that has changed utterly since it was established in 1919. In recent years the pace of change has been so rapid that the old conventions no longer hold. There is now a strong case for a comprehensive Universities (or Higher Education) Act. With tensions and now the UGC there is already material for several

Laurie Taylor



Students are working harder

"I think we've come a long way away from the late 1960s, early 1970s when a young revolutionary said to me: 'This is a fun place, man'." - Keele University administrator quoted in *The Times* August 30, 1985.

Scene. Somewhere near the administrative block, Keele University.

Hi, there!
Hi!
Hey man, you look really out of your head.

Oh yeah.
Really spaced out.
Well it's this scene, man. You know what this place is?
Tell me, man.

This is a fun place, man. This is fun place.

Yeah?
I just had this really beautiful trip.

With some chick?
Yeah man. She came back to my pad, you know, and we really, like, you know, we really turned on.

Wow!
Yeah ...
That sounds really mind blowing, man.

Too much ...
You too getting it together?
No, man, it could get heavy.

Know what I mean? Really heavy.

Yeah ...
I gotta find myself some space. Do my own thing.

Oh, yeah.
I don't want any hang-ups, man. No hassle. No bad vibes.

Yeah, well, remember, tomorrow's the first day of the rest of your life.

Wow, that's beautiful. Really beautiful ...

And hey, man.
Yeah?
In case I don't see you around the campus any more.

Yeah?
Best of luck with your early retirement.

Hey, yes. And you with yours. Let's make some really good karma with the old lump sum.

Far out.
(Exit left pursued by fully-clothed students.)

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Ivan and the Terribles sound off a breezy note at a jazz evening at the Standing Conference of University Information Officers conference at Reading University. All information officers, the band from left is: Frank Albrighton from Birmingham on trumpet; Brian Rawlins from Keele, vocals; Sue Boswell from Goldsmiths' College, London, clarinet; and Ivan Strahan from Queen's, Belfast, flugelhorn. Roland Hurst from Kent was unable to play piano after a DIY accident to his fingers.

Graduate employment figures challenged

by Olga Wojtas
Scottish Correspondent

Government views on the poor employment prospects of art and social science graduates will be challenged at a conference in Dundee University later this month.

Figures produced by the Standing Conference of Arts and Social Sciences in Universities reveal a substantial change in employment trends over the past five years.

More than 25 per cent of arts and social science graduates last year went into commerce and industry. More than 6,000 found employment in banking and insurance, compared to around 3,500 science and engineering graduates.

The proportion of arts and social science graduates entering teacher training has almost halved over the past five years to just over 7 per cent, and there has also been a decline in the proportion entering research.

This has been balanced by increases in the proportion entering other areas - for example, consultancy work, entertainment and self-employment - so that the level of unemployment this year, 10.7 per cent, is only marginally higher than in 1980 when it was 10.4 per cent.

This compares with an unemployment rate of 13.7 per cent in biological sciences, and 9.1 per cent in physical sciences.

FCS emerges unscathed

A Conservative Party review of the constitution of its strife-torn student wing is expected to leave the organization largely unchanged and firmly in the hands of the right.

Party leaders ordered a review of the constitution of the Federation of Conservative Students after an internal inquiry found evidence of rowdy behaviour attributable to excessive factionalism at its annual conference in Loughborough earlier this year.

A wide range of changes were recommended by the inquiry and several of these have already been

Complacency must stop - Rayner aide

by Paul Flather

One of the Prime Minister's advisers has given a stern warning to universities to drop the complacency and inertia characteristic of their "closed community" and start a serious debate about methods to promote efficiency and change.

Mr Ian Beesley, a member of Mrs Thatcher's Office Efficiency Unit set up by Lord Rayner, expressed impatience that some four months after the Jerratt Committee, on which he sat, had produced its report, the universities had still not begun.

He told the Standing Conference of University Information Officers at Reading University this week that universities could not stand still - they either went forward or backwards. He reminded his audience of the Cooperative Society which used to be the best in the world but could not keep up with Sainsbury's.

He explained the background to the work of the efficiency unit and the way the Rayner men had scrutinized the universities, including the need to set targets, forbid new committees, take nothing for granted, and ensure any report was implementable.

A key principle was always to involve those in authority who would have the job of making changes and reforms. That was why the Jerratt committee had been guided by six vice chancellors.

He discussed the problems of performance evaluation, noting with dismay the stock reply from so many: "Well, we did cope with the 1981 cuts." He said: "If that is the kind of response you give then it could well lead people to ask you to do the same thing again."

He described how he had found universities relatively unaware of their costs, such as unused rooms or laboratory overheads. He noted dryly how one electronics team was charging less per hour for some company research than his local garage did for car repairs.

Mr Beesley, a career civil servant who joined the Rayner unit in 1979 and is involved in the current review of the University Grants Committee, also had a double message for the information officers: to help get the Jerratt report widely aired, and to produce a less defensive and more positive image of universities.

Need for friends; page 4

Union angered as v-cs break ranks on pay

by David Jobbins

Vice chancellors have broken ranks with union leaders to deliver their own warning to Sir Keith Joseph, Secretary of State for Education and Science, over the damaging effects of deteriorating pay levels on universities. The Association of University Teachers has pressed for a joint approach to Sir Keith, but the employers' side refused until this year's salary negotiations were out of the way.

Now Mr Maurice Shock, chairman of the Committee of Vice Chancellors and Principals, has written to Sir Keith this week outlining their fears. It was emphasized that the initiative did not come directly from the employers' side of the negotiating forum, but from the CVCP.

Union leaders are angry because the letter outlines sweeping plans for a new performance appraisal system for university lecturers at a delicate stage in this year's negotiations.

The proposals foreboded by Mr Shock include a longer probationary period for academics and a new salary structure providing greater incentives for a high level of performance. They are to be finalized at the vice chancellors' residential meeting in Leicester later this month and the AUT was expecting to be invited to discuss them shortly afterwards.

Ms Diana Warwick, the AUT's general secretary, said this week: "I hope they are not offering these to Sir Keith as tablets of stone - they are matters for negotiation. We pressed the vice chancellors for some indications a month ago even if they could not give us details. None of this emerged then - they refused to say anything at all about their structural proposals."

The initiative is unlikely to breach the deadlock in negotiations which has existed since the beginning of August when the employers refused to improve on a 4 per cent offer.

But early indications of voting on a pay offer at college lecturers worth 7 per cent by the end of the year show a high level of support despite attempts by some union leaders to thwart the deal.

First returns from branches of the National Association of Teachers in Further and Higher Education, mainly from further education colleges, showed total support, with no votes recorded against.

This was despite recommendations from at least three of NAFHE's 14 regional executives to reject the deal, which includes the long-sought automatic transfer from the top point of the lowest salary scale.

In the north west, where the executive voted to recommend rejection, all 14 branches meeting by the middle of this week had voted to accept, precipitating complaints that the leadership was wildly out of touch with its members. Other executives recommending rejection are Inner and Outer London.

Employers' leader Mr John Pear-

man warned that rejection by Nafthe at its council meeting on September 30 would be "an incredible gaffe of the most dangerous order". The employers would probably fall back to a 4 per cent offer and the Lecturer 1/Lecturer 2 proposal would be "off the table within an hour".

Mr Shock conceded no new money could be available for the current financial year, in which they have restricted their offers to all groups bar the manual workers to 4 per cent.

But his letter makes clear the vice chancellors fear dire consequences if the pay factor for next year, rumoured to be a target 3 per cent, fails to make provision for a "substantial rise" for all groups and cover the cost of the alterations to the academics' salary structure.

The root problem is that academic staff have in recent years had such low salary settlements that the universities have fallen behind other callings recruiting from the same sources; they are now in danger of lagging still further.

The effects, he told Sir Keith, were likely to damage the efficiency and effectiveness of the universities, with an increasing loss of some of Britain's best scientists overseas. "We have argued for several years that this would be the outcome of Government policy. Are we now to spend further years of vexation and disruption before the position is put right?"

Mr Shock points out that a policeman after five years' service at 27 earns £9,825 a year, 10 per cent more than the £8,920 for a similarly aged university lecturer.

The vice chancellors also call for talks with Sir Keith on the way pay is negotiated and funded to make it more "rational and equitable".

But the employers and union side share the view that the present negotiating machinery is crumbling at the edges.



The memoirs of Horace Walpole, 15

Brooke shuffled back into hot seat

Sir Keith Joseph's brief period of personal scrutiny of the Open University and the rest of adult continuing education ended this week with a reshuffle of ministerial responsibilities at the Department of Education and Science.

The brief returns to Mr Peter Brooke, whose load was lightened in March after the death of his wife. Mr Brooke retains responsibility for high-

er education and science, including the research councils and student affairs. Mr Christopher Patten, the new minister of state, includes further education, training and the 16 to 19 age group among his responsibilities, as well as keeping a watching brief on the reform of local government finance. Mr Bob Dunn has education research, special education and the youth and community services among his responsibilities.



A few days ago I saw a preview of a programme which will probably have been seen by my readers by the time this column appears. It was the first programme - followed by the ninth - in the series about to be shown on BBC2 and entitled *The Triumph of the West*.

It will be the latest, and I suppose possibly the last, of the great BBC blockbusters that started with *Civilisation* and have since been some of the glories, as well as the occasional disasters, in the BBC's history. I believe it may be the greatest of them all. Judging by the spontaneous applause that broke out even before the credits were seen at the end, my view was shared by most of the informed and critical audience at the preview.

The programmes have been devised, written and presented by John Roberts, until recently vice-chancellor of Southampton University, now Warden of Merion College, Oxford, and the author of a phenomenal *History of the World* that was launched absurdly as Hutchinson's *History* but now appears under his own name.

His academic reputation is of course assured; what could not be known in advance is that he is a born presenter, wonderfully articulate, bubbling with ideas and cheerfully hospitable to every encounter. I have some experience of devising and presenting programmes and I bow to him. He trots around the world, never at a loss for telling phrases and changing his suit every few minutes for a new scene. There will be an exhibition of his suits, shirts and ties in the University of Oxford when the series comes to an end.

The theme is original and amply supported by the evidence. *The Triumph of the West* is not the conquering of far countries that became part of the Empire; indeed the decline in military power, by starting his study in the West but in Thailand and then moving (a little hurriedly) to China, Japan and India, Roberts establishes that the West has captured the life of non-western countries in a fundamental way, much more fundamental than if they were subject peoples. In terms of technology and finance and culture, the values and the aspirations of those countries as well as the language (English is the second language of the world) are what the West has decisively shaped.

In case that sounds solemn, let me add that the production is quite brilliant. Christopher Martin is a great producer and has an unfailing eye for the revelatory detail as well as the grand scene. He exercises a caustic visual wit. Typical of that - and beautifully timed - was the picture of two Chinese opera singers in costume, singing *Madam Butterfly*.

The presentation of the series is timely when the BBC seems to be in trouble. I do not believe most of us care much if the BBC makes the occasional political gaffe or talks sometimes to MIS (it would be odd if it didn't). What matters to most of us is that the BBC should produce programmes of superb quality. And it may help to put some balance into the arguments about the licence fee. The fact is that few of us viewers actually want adverts. We want good programmes. The need for adverts is a problem for politicians. They might do well to consult the views of viewers.

Patrick Nuttgens

Letters to the editor

Standards of private colleges

Sir, - John Belcher's letter (*THES*, September 6) suggests that the current approach to accreditation by the British Accreditation Council (BAC) contains a loophole which needs to be closed. Clarification of the role of the BAC may help to answer his concerns.

The BAC exists to accredit institutions. It does not exist to validate degrees. This approach was the one adopted by the DES in its scheme for the recognition of institutions in the private sector. The demise of this scheme in 1982 constituted the major reason for the establishment of the BAC.

The BAC, which is a registered charity, contains on its board nominees of the Committee of Vice-Chancellors and Principals, the Committee of Directors of Polytechnics and the Council for National Academic Awards as well as other organizations closely involved in the maintenance of standards in British further and higher education and these bodies have an important influence on the policies and procedures of the BAC.

Where private colleges prepare students for the degrees of overseas universities, the BAC seeks to be satisfied as to the quality of tuition offered and the acceptability of students holding that award by British universities, polytechnics and professional bodies. The BAC also requires institutional publicity accurately to reflect this acceptability.

The BAC is not in a position to comment on the quality of overseas accrediting agencies, although it is interesting to note Mr Belcher's view that "it is not possible to depend on a rigorous system of accreditation of post-secondary institutions in the USA". If this view is accepted, it reinforces the current BAC position that its concern must be with the quality of tuition of private colleges as judged by people familiar with British

education and these bodies have an important influence on the policies and procedures of the BAC.

Mr Belcher's own views about BAC accredited institutions should, therefore, be set against this evidence and against the views of BAC inspectors upon whose advice the BAC depends in making its decisions.

Potential students certainly need to be aware of the acceptability of the degrees that they are awarded in private colleges in the UK. The part that the BAC can play in this has already been described but it would be wrong to overestimate the role of the BAC in this regard.

Yours faithfully,
DAVID W. PARRY,
Executive Secretary,
British Accreditation Council,
114 Chase Side,
London N14 5PN.

higher education (as many BAC inspectors are) and the acceptability of these awards as seen by British institutions.

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Yours faithfully,
DAVID W. PARRY,
Executive Secretary,
British Accreditation Council,
114 Chase Side,
London N14 5PN.

British history

Sir, - The stimulating four essays on education by Peter Scott (*THES*, August 2-30) cause me to comment on a number of points.

In the first essay it is stated that Britain has become an ahistorical society. History, it is true, no longer has the hold it once exercised over the best minds as a key to present living. One of the reasons is that the links of the past with the present have become relatively tenuous because of the stupendous advances of science and technology. A society, in studying its past, looks for and is stimulated by connections which give it some insights towards shaping the present and planning the future. The dramatic changes during the last few generations have weakened the degree of continuity between past and present and, with it, the desire to understand what has gone before.

One significant pointer to an increasing interest in our heritage is the membership of the National Trust; this has risen to more than a million from under 50,000 a generation ago.

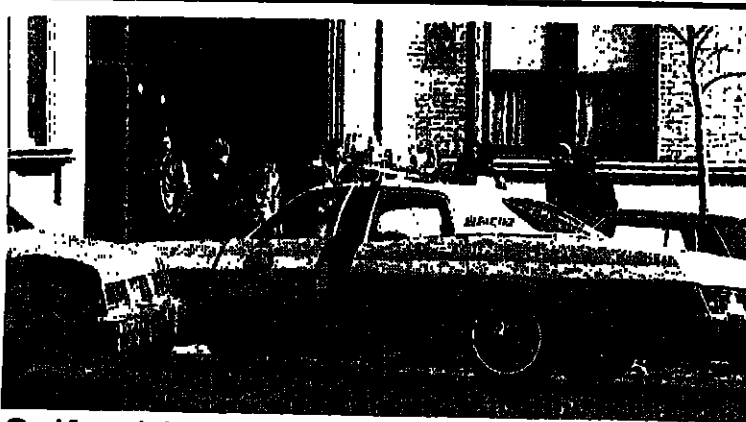
The third essay emphasized the roles of civic and vocational literacies. The largely liberal education of old was appropriate at a time when science and technology had not achieved the pre-eminence they occupy today. It is generally accepted that the present age calls for a school curriculum which should embrace the arts and science. Secondary education in Continental Europe and the USA has achieved an acceptable combination of liberal and vocational studies. The "attempt to create two quite separate beings, economic man (and woman) and the cultivated citizen", to quote from the third essay, is a situation largely of our own making.

The assertion, correct I am afraid, that many of our people at the tip of the double-edged sword of the academically less able pupils in liberal subjects, disturbs me. Such an approach could also easily be advanced for studies in science. The proposition of putting a restriction on the study of arts subjects in secondary education on account of limited scholastic ability is something new, and should be resisted. Restriction on the depth of study, especially in higher education, is an entirely different matter.

The final essay contains the comment that scientists have rarely attempted to develop alternative cultural codes to those which they inherited. It is probably expecting too much of scientists to propound major innovations to our social fabric, in addition to making original advances in their own fields.

The key issue in our secondary education, still unresolved after unsuccessful attempts over the last two decades, is the broadening of the curriculum. We need to attain the breadth of studies combining the arts and science as found in European and American schooling. And this will only come about when we make the appropriate specifications in our entry requirements for higher education.

Yours sincerely,
L. J. HERBERT,
Teeside Polytechnic.



Self-evident

Sir, - In his reply to my review of his book (*THES*, August 30) William Isel accuses me of, among other things, inaccuracy and misrepresentation. Much of the dispute between Professor Isel and myself can only be settled by readers themselves assessing *Social Change in the United States 1945-1983*. However, on two specific points, I must be allowed to comment.

First, I am sure that Professor Isel does not deliberately "ignore or suppress evidence". However, it does seem odd that in a book of this sort no social survey evidence on the views of American blacks or any other group is cited. Second, it seems most curious that Professor Isel's "mild is begged" by my claim that the 1954 Housing Act is possibly more important than the 1949 Act, when the former officially designated the programme "urban renewal" (there was no reference to this term in the 1949 Act).

More important, the 1954 Act introduced other changes which in the words of one established authority (Wolman, *The Politics of Federal Housing*, 1971, p40) "moved urban renewal from a programme whose primary purpose was to improve housing for poor people towards a programme whose purpose is more to renew the central city tax base and to recall middle and high income whites from the suburbs to the city".

Finally, in his book William Isel refers to 1951 amendments to the 1949 Act (p17). No such legislation exists. I am sure the author agrees that books designed as undergraduate texts should get the facts right. Yours sincerely,
DAVID MEKAY,
Senior Lecturer, Government,
University of Essex.

Decline and fall

Sir, - I am grateful to N. J. Wilmott for suggesting that I might undergo a crash course in scientific methodology (*THES*, letters, August 23). Unfortunately his letter seems to be based on the rather odd hypothesis that my letter was intended to disprove the Freudian opus; it seems unlikely that any short letter would be adequate for such a purpose! Perhaps if he/she would read my book on *The Decline and Fall of the Freudian Empire*, which makes a serious attempt to examine the claims made for psychoanalysis as a scientific discipline, we could have a more serious discussion of the adequacy of this view.

My Rose, in her letter seems to make the usual assumption that because I consider one judgement by Sir Peter Medawar to be well-founded, rooted as it is in his medical expertise and his wide reading in psychoanalysis, therefore I should also consider all his other

views as inviolate, including his views on the genetics of intelligence, a topic where it cannot be said that he possesses any proper academic background. His criticisms have been offered to the public only in popular newspapers, never, as far as I am aware, in properly refereed scientific journals. If he would agree to submit to the usual scientific discipline of serious criticism, I would be happy to answer him; his popular writings hardly deserve such attention. Yours faithfully,
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Denmark Hill, London SE5 8AF.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

available to everyone not merely those within the school. The fully spelt out documentation is on open shelves in the reference library. As an external examiner I am aware that this is also the case elsewhere.

We would envy the apparent ability of the chair of art and environment in the Open University to take all comers. We are constrained by a resource-rich framework which commits us to wider than schools which produce unrelentingly high A level results. After such an exercise, of course,

Unifying poly admission

Sir, - I understand Dr Milton's intention (*THES*, September 6) as the fact that the advanced courses at the "mixed economy" college neither recruit through the newly established admissions system for the polytechnics, PCAS, nor are listed in the appendix in the PCAS Guide.

Applicants which sets out all full-time degree courses at public sector colleges outside the polytechnics.

It is the hope of many, Department of Education and Science and Higher Education Advisory Body included, that a course there should exist a full-time admissions system for all public sector colleges and sandwich courses. They are also those who would consider a logical for PCAS to embrace all advanced courses such as HNDs, if that was established to cope with the need to smooth the path for polytechnic applicants whether from the UK or abroad as well as to lift some of the overwhelming pressure on institutions (this year, for example, Bristol had some 34,000 applications for 2,500 places).

The courses concerning Dr Milton, and doubtless also colleagues all over the country, are mostly part-time degree and degree equivalent courses which, to a very great extent, recruit locally. To set up a clearing house to coordinate what does not need coordinating would mean the imposition of unnecessary bureaucracy at university expense.

The problem which Dr Milton highlights is that there currently is no handy, easily assimilated, accurate work of reference that lists all advanced courses in the public sector. My colleagues at PCAS and I are aware that our guide is already being used by schools and elsewhere as a student text on full-time and sandwich degree courses but to extend the guide to cover courses to which PCAS does not relate and for which it is not funded would add unnecessarily to the financial burden imposed on polytechnics and applicants who, between them, meet the costs of running PCAS. Nor were someone to come up with additional resources to enable PCAS to produce the requisite all-encompassing document that might be a different matter!

I am grateful to Dr Milton for his concern. In the early days of PCAS constructive comments such as his on about how PCAS might develop. Yours faithfully,
M. A. HIGGINS,
Polytechnics Central Admissions System,
PO Box 67,
Cheltenham GL50 3AP.

Validation
Sir, - John Honey (*THES*, letters, August 30) advocates that all degree-awarding institutions should publish the names and addresses of their graduates. This would be a grave invasion of personal privacy. The administration of my former university had a policy of refusing to release names and addresses of students. Why should graduates be treated differently?

No, Mr Honey, the answer to degree mills is an independent body which checks the standing and quality of institutions and courses (in all sections) and then goes on to certify academic achievement. We could call such a system "national validation". Yours faithfully,
TIMOTHY BROWN,
Former deputy president,
Newcastle University Students Union,
24-25 Newton Street,
Newcastle upon Tyne.

Validation

Sir, - I am grateful to N. J. Wilmott for suggesting that I might undergo a crash course in scientific methodology (*THES*, letters, August 23). Unfortunately his letter seems to be based on the rather odd hypothesis that my letter was intended to disprove the Freudian opus; it seems unlikely that any short letter would be adequate for such a purpose! Perhaps if he/she would read my book on *The Decline and Fall of the Freudian Empire*, which makes a serious attempt to examine the claims made for psychoanalysis as a scientific discipline, we could have a more serious discussion of the adequacy of this view.

My Rose, in her letter seems to make the usual assumption that because I consider one judgement by Sir Peter Medawar to be well-founded, rooted as it is in his medical expertise and his wide reading in psychoanalysis, therefore I should also consider all his other

views as inviolate, including his views on the genetics of intelligence, a topic where it cannot be said that he possesses any proper academic background. His criticisms have been offered to the public only in popular newspapers, never, as far as I am aware, in properly refereed scientific journals. If he would agree to submit to the usual scientific discipline of serious criticism, I would be happy to answer him; his popular writings hardly deserve such attention. Yours faithfully,
H. J. EYSENCK,
Institute of Psychiatry,
De Crespigny Park,
Denmark Hill, London SE5 8AF.

Letters for publication should arrive by Tuesday morning. They should be as short as possible and written on one side of the paper. The editor reserves the right to cut or amend them if necessary.

available to everyone not merely those within the school. The fully spelt out documentation is on open shelves in the reference library. As an external examiner I am aware that this is also the case elsewhere.

We would envy the apparent ability of the chair of art and environment in the Open University to take all comers. We are constrained by a resource-rich framework which commits us to wider than schools which produce unrelentingly high A level results. After such an exercise, of course,

Poly threatened by council bankruptcy

by Adriana Caudrey

Liverpool Polytechnic funds could be siphoned off and used to run emergency and basic local services if the city council becomes bankrupt at the end of the year, as has been widely predicted.

This grim warning, issued by Mr Dominic Brady, chairman of Liverpool council's education committee, could mean the polytechnic facing a threat of closure and staff having their contracts terminated.

Mr Brady told the *THES* this week: "If the worst came to the worst, the polytechnic would not be able to get its money. It would be impossible to look at the polytechnic in isolation. Money might have to be diverted to emergency services and such things as urgent housing repairs."

Both Mr Paul Luckock, chairman of the polytechnic's governors, and a member of the education, and the finance and strategy committees, and Mr John McKenize, rector of the polytechnic, have strenuously denied the council's right to divert their funds.

The lion's share of the funding - about £20 million - comes to the polytechnic from the Advanced Further Education Pool, which is mostly made up of government money, but is channelled through the council. A further £3 million comes to the polytechnic through fees, and a "top-up" sum of about £2 million is provided

by the council. According to Mr Luckock the pool money is "guaranteed" to the polytechnic. He said: "My position and the rector's is that the local authority is purely the steward for the money received through the pool to run the poly. That money cannot be used to finance other services."

He said that no final decision could be voiced about the poly's financial fate until a special education committee meeting had been held later this week to discuss the implications of the council's budget crisis.

Mr McKenize added: "The polytechnic is a different animal from any other part of the city, and the council is aware of that. I am." He is adamant that the pool money which is specifically earmarked for the poly cannot be diverted: "I expect the city council to be a good steward and preserve the money for us."

He says the poly will open as normal at the start of the new term, and he does not foresee that academic standards will suffer, or that he will be unable to pay his staff.

However, a Department of Education and Science spokesman told the *THES* that the pool money would not necessarily be sacrosanct in the event of the city council's financial collapse: "It appears that the AFE Pool would not be insulated should the council become insolvent."

Underestimating inflation will cost places, warns NAB

by John O'Leary

Some 2,500 places will be lost in polytechnics and colleges for every percentage point by which inflation exceeds Government estimates, a working group of the National Advisory Body was warned this week.

A report on next year's budget for public sector higher education predicted that the position will be "less favourable" since local authorities are likely to reduce their own contributions to institutions and the Government has consistently underestimated the movement of pay and prices.

The report, presented to a meeting of the NAB's technical and data group, forecast a 7 per cent increase in salaries and at least 6 per cent in prices, compared with current Government estimates of 4 per cent overall. With the advisory body already committed to protecting funding levels, the result would be a cut of at least 5,000 places for 1986-7.

A rejection of the NAB's request for

more funding to pay for additional teacher training places would mean a further reduction in student numbers in the arts and other non-vocational areas. Sir Keith Joseph, Secretary of State for Education and Science, is expected to respond to that request next month.

In spite of this uncertain background, the NAB is going ahead with plans to hold back some £90 million from next year's advanced further education pool to fund research and reward advanced work. The working group recommended simplifying the process by which this would be achieved, allocating 20 per cent of the pool only to colleges and polytechnics with a majority of advanced courses.

Such a mechanism would go some way towards redressing the losses incurred by the polytechnics when their reserved share of the pool is abolished. The NAB committee has already ordered that all institutions should be funded on the same basis.

'Make your own chips' move

Polytechnic students will be able to design their own silicon chips if the Government agrees to fund a £15 million scheme supported by the National Advisory Body.

The NAB committee agreed last week to press ahead with plans for a facility costing £150,000 in each polytechnic or college offering electronic engineering. It drew back from offering immediate support for a wider scheme to make the chips as well.

Proposals for design and fabrication facilities came originally from the polytechnic heads of electronic engineering and were largely supported at a meeting of civil servants industrialists and higher education planners. They stressed the urgency of producing "self-conceptual" engineers, with direct experience of fabrication.

Only four polytechnics currently have any facilities for designing integrated circuits and Middlessex alone has a fabrication facility. In addition to the capital costs of setting up work stations, the scheme would require £50,000 per year to be spent in each institution on software, raising the cost in the first of the three years to £6,650,000.

SDP fears 'emasculat' of research effort

The Government's attitude towards short-term profits means they have emasculated the research budget and the research efforts of this country, the Social Democratic Party conference was told at its debate on high technology.

This attitude was part of a national lack of appreciation for the intangible assets of research and development, education and training, said Mrs Margaret Sharp, one of the authors of the SDP's policy document on high technology: *Focus on the Future: a strategy for innovation*. "The Government is destroying the power of creativity," she said. "They have also decimated what we had in the way of a decent industrial training service: the Industrial Training Boards. They have replaced them with the Youth Training Scheme but the

forms of financial support for high technology investment, and a major extension of engineering scholarships and awards to increase and improve management and the status of engineers.

Several speakers bemoaned Britain's failure to transform its numerous Nobel prizes into profitable goods, its failure to produce well qualified managers, and to improve public appreciation of technology and technologists along the way.

The prospective parliamentary candidate for Wantage, Winifred Tunin, told the conference that her constituency included Harwell and was full of scientists with serious doubts whether the educational underpinning of the document were adequate.



Some of the American students from Chicago getting to grips with life in central London

First of new breed of colleges

Britain's newest educational establishment opened its doors to students last week, beginning its first academic year at least three weeks before its more traditional competitors.

Regent's College, London, describes itself as an "educational and charitable foundation". It is self-supporting, and aims to be an "international meeting place", encouraging a broad and lively approach to studies.

The college is unique in the way it has set itself up as a site for higher education, and may come to be seen as the first of a new breed of privatized higher education colleges. Anybody who wants to set up a course at the college is welcome to do so all they have to do is set the curriculum and pay for academic and administrative staff

and the use of lecture and residential halls.

Salford University has already moved its diplomacy studies course to this central London site, and the University of Southern California will be running its masters courses in international relations there in the near future.

At the moment there are only 30 students, all from Rockford College, near Chicago. In the next few weeks other groups of American students will arrive, although the college is not expected to reach its full potential until after Christmas.

The students from Rockford are invited to spend either one or two 15-week semesters following a comprehensive survey and investigation

into the cultural, economic and historical life of Britain. The course is taught by a mixture of American and British tutors, and will take full advantage of the college's situation in London.

Rockford College is "sponsoring" the new venture putting up much of the £3.5 million so far spent on renovations to the old Bedford College in Regent's Park, with the British Government providing large improvement grants. In return, Rockford hope that the opportunity of studying abroad will attract more students to its Illinois campus.

It may seem ironic to those mourning the disappearance of Bedford College that Rockford's college colours are identical to those of the University of London: purple and white.

Lecturers step up action

The Secretary of the Scottish Education Department, Mr James Scott, last week handed over a presentation catalogue of 2,000 national certificate modules to Dr Peter Clarke, chairman of the Scottish Vocational Education Council.

The national certificate, awarded by Scotvec, will replace all non-advanced further education courses in Scotland.

But further education lecturers, who for the past two years have been developing the action plan modular courses, are poised to disrupt the scheme's progress by reducing maximum class contact time from 24 to 22 hours.

Redundancy fears in Strathclyde, page 6.

FCS emerges unscathed

continued from front page

FCS. Under the existing arrangements, the area chairmen are present but have no vote, while the 11 other members of the national committee are elected from annual conference and generally tend to be on the right. How they will be elected in future is one of the issues still to be finally decided, although the inquiry report recommended postal ballot.

The right failed in its aim to have a commitment to expand the Conservative influence in local and national student organizations, from the constitution, but was able to modify the wording so that they believe they are no longer obliged to work with the National Union of Students.

The FCS half-yearly council has been postponed until December so that it can ratify the new constitution in time for its implementation for the annual conference next spring. It will need a two-thirds majority and will be voted on in its entirety. While rejection is a possibility, FCS leaders believe it to be remote.

This will leave their way clear to carry on largely as before the inquiry, and they are greatly encouraged by Mr Gummer's replacement by Mr Norman Tebbit, with whom they are politically more in sympathy. FCS chairman Mr Mark MacGregor has already met Mr Tebbit, who indicated a wish to see the organization "back in the family".

The industrial tribunal case will begin in Glasgow on Monday.

Professor Angela Bowey of Strathclyde University, a commissioner for the Equal Opportunities Commission, is next week bringing a sex discrimination case against the EOC.

Professor Bowey, who is professor of industrial relations in Strathclyde business school, and EOC commissioner for Scotland, alleges sex discrimination by the EOC in not interviewing her for the post of chief executive.

The industrial tribunal case will begin in Glasgow on Monday.

Forms of financial support for high technology investment, and a major extension of engineering scholarships and awards to increase and improve management and the status of engineers.

Several speakers bemoaned Britain's failure to transform its numerous Nobel prizes into profitable goods, its failure to produce well qualified managers, and to improve public appreciation of technology and technologists along the way.

The Story of Architecture

PATRICK NUTTGENS

Written by a well-known, practising architect, this book is not a history of styles. It aims to make the intelligent, unspecialized reader understand 'why' a building was built the way it was. The central theme is the evolution of building and the scope is world-wide, based upon years of research and a lifetime of personal experience. Essential background for every student of architecture and interested layman.

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PHAIDON

DON'S
DIARY

MONDAY

Arrive noisily at Newnham with a chugging exhaust pipe. My cautious speed on the motorway means I am late, but my key is waiting at the porter's lodge along with a bulky brown envelope.

Follow a tortuous route to the flat where I am to live. I install my belongings, and soon the piles of Penguins, Loeb's and Oxford Texts, with the ubiquitous GSCC Criteria (to be read tonight without fail) lend an air of studious activity to the place. Balance four postcards of Ceryatids on the mantelpiece to complete the effect.

The bulging brown envelope contains reassuring domestic information, and I note that dinner is already being served. Dine with a young don who talks in radical feminist vein on the vital importance of Newnham's remaining a single-sex college, and maintaining its position as a liberal and progressive institution with the important role of providing opportunities for women undergraduates and academics. There is nothing of the girls' public school atmosphere I had feared.

TUESDAY

Breakfast at Newnham, and as I sit in the sunny alcove looking out on the splendid gardens, I remember the advertisement I had almost a year ago in *THE TES*: "The aim of the Commonwealth is to give the schoolmistress leisure for thought and study..." and for the first time in years, I have the leisure to read thoroughly the day's newspapers and reflect on Sir Keith's latest statements.

Mid-morning I am taken round the classics faculty building. The noticeboards are crammed with announcements about meetings I know I shall be free to attend (no marking!). Lunch provides me with the first opportunity to meet the dons. I am recognized as "the schoolmistress" (my official title, the Ruth Cohen Schoolmistress Fellow Commoner, is far too much of a mouthful) though I have to explain that I'm not actually from a school, but an FE college. "FE" causes some blank looks and I think of the advert "to help university teachers understand more about educational provision for 16-19 year olds."

Spend the afternoon in the classics faculty library. I have prepared an outline programme of study on fifth-century Athens but every single book I see looks like essential reading. Feel like a competition winner who has 30 seconds to fill a trolley in Harrods' foodhall.

Receive first invitation to "sherry in my rooms".

WEDNESDAY

Must do more than sit in the library if I'm to make the most of my time in Cambridge. Select two lecture courses on Athenian and Spartan societies which I shall attend with the undergraduates. First lecture begins at ten. As a language teacher, trained to encourage the class to talk, I feel ill-at-ease watching this one-man show with strictly no audience participation. However, soon sit back, relax and enjoy the performance. Decide the lectures can be more informative and inspiring that I had thought. Mental note to include formal lecture input in my A level classes at the tech.

THURSDAY

I'm having no trouble settling into the Newnham routine. My now

disciplined visit to the library (today I am deciding what Xenophon could contribute to classical civilisation A level) is interrupted only by lunch across the road in Newnham.

I have signed up for the Fellows' dinner on Friday. Gowns are generally worn. Decide to get myself properly rigged out, and discover that by snipping off two ribbons, I can convert a second-hand Cambridge BA gown into a Bristol one. Pleased with the bargain I have struck, I stroll back to Newnham and the Oeconomica, blissfully aware that car-parking, late-night shopping and even later-night marking are not the preoccupations of a Schoolmistress Fellow Commoner.

FRIDAY

The sun is warm, and I regretfully wonder why fine weather always comes during the week and never at weekends when I am free to go out and enjoy it. Slow realization that Friday no longer means teaching in a dreary room from 9 to 4.30. A Schoolmistress Fellow Commoner has leisure to study what she wants, where she wants!

I make for a sunny spot in the garden with a book about women in antiquity. I saw the title in a catalogue at Filton months ago, but didn't have the time to pursue it then. This morning had breakfast with the author herself! Try not to feel guilty about having the leisure for study while colleagues at Filton, bleary-eyed from last night's marking, must be well into their second teaching period, tenth telephone inquiry, and 40th memo of the day.

Formal dinner on high table is fairly informal, except perhaps for the Latin grace. Conversation touches on people known to me only from the columns of *THE THES* or from booklists issued by the examination board. Seems I could bump into them any time in the corridors here! Better prepare some questions, just in case.

SATURDAY

So far, I've hardly left the bounds of Newnham and the classics building just across the road. I shall be expected to be an authority on all the Cambridge colleges after my stay here and so start today a grand reconnaissance expedition. First stage involves a leisurely walk through King's, Corpus, Clare, Jesus and John's, evaluating the architecture and horticulture. Return to Newnham and before starting on the weekend's reading (complete works of Aristophanes), write to various admissions tutors to arrange more formal inspections.

SUNDAY

My room is comfortable, but the antique mahogany desk is barely visible under the piles of newly borrowed books and the contents of the brown envelope (still frequently consulted). Decide to go downstairs and work in the college library. It's so well stocked, wonder if I'll need to leave Newnham at all for the next few days. Choose quiet niche overlooking by portrait of ancient Newnhamite, and settle down to undisturbed session with the plays.

Feel particularly satisfied at about 4pm - the time I usually force myself to face up to the stacks of marking and preparation for Monday. As a gesture to freedom and leisure, I put aside Aristophanes and open my diary. Next week's academic programme is set out - aims, objectives, method - with true schoolmistress efficiency, but there has been a shift in the salient phrases which govern my existence, and "Quantity of marking" is rapidly giving way to "quality of life". Smile conspiratorially at the ancient Newnhamite and smugly congratulate myself on having been awarded a Schoolmistress Fellow Commonership.

Sally Knights

The author is a lecturer at Filton Technical College, Bristol, who has taught at term at Newnham College, Cambridge, as a Schoolmistress Fellow Commoner.

Promotion of science urged

by Jon Turney
Science Correspondent

The Royal Society this week threw its weight behind a campaign to involve the whole scientific community in promoting the public understanding of science.

The society's council has endorsed a report from a working party under Professor Walter Bodmer, research director of the Imperial Cancer Research Fund, calling on all scientists to work harder to understand how the press and TV work, and to speak and write about science in lay language.

The report, published earlier this week, argues that "scientific literacy is becoming an essential requirement for everyday life". While education and the mass media must try to give everyone a basic understanding of how science works, the group say their most urgent message is that it is a scientist's duty to communicate with the public.

In addition, they recommend the Royal Society itself should offer an annual prize to a scientist or scientific organization for promoting public understanding of science, offer more briefings on scientific topics for journalists, and advise other societies how to help, all these initiatives to be overseen by a standing committee. Professor David Smith, the society's

vice president, says in a foreword it will shortly respond positively to these suggestions.

The report follows an earlier set of recommendations on scientific education, and many of these are repeated. The group say better public understanding of science would enhance national prosperity, improve the quality of public and personal decision-making and enrich non-scientists' appreciation of our culture.

However, they admit little is known in detail about public understanding of science, as distinct from surveys of attitudes to science and technology. And the report asks the Economic and Social Research Council to sponsor research into ways of measuring public understanding and assessing its effects.

Meanwhile, they want to see changes at all levels of education, from renewed efforts to improve adult literacy and numeracy to more general science courses in universities. The report's main educational focus is at primary and secondary level, repeating earlier calls for more primary science and a broader secondary curriculum in which all pupils would study some arts and some science subjects throughout. The group say university teachers must be persuaded of the overall social value of a broader post-

16 educational system.

In the media, the report urges the BBC's funding, currently based on account of the importance of the science output, and the group want to see more science in general programmes. They regret that "the scientific community traditionally regards the mass media with some suspicion and on the whole, ignorant of the way they work".

But even if they got on better with journalists, scientists should not leave it to them to communicate science to the public. Self-interest alone, the report implies, directs them to a more active role. "If the public is not to be about the scientific research it supports, it is unlikely to worry if the lack of support is reduced."

To help, the group recommends some aspects of popular communication should be part of a formal scientific education, perhaps culminating with a requirement for every PhD candidate to produce a short article explaining their work to a lay audience.

The public understanding of science, £6.90, available from the Royal Society, 6 Carlton House Terrace, London SW1. Shorter, illustrated version available free on request.

Creating a warmer environment

by Owen Surridge

Diffidence about the place of the environmental sciences in higher education was the unofficial but persistent strand running through the third international conference on the subject held at Sunderland Polytechnic this week. There was much talk of how to fit in, how to convince traditional academics of the respectability of the subject.

They were not without encouragement though. Dr David Clark, Mr. Opposition spokesman for the environment, told them at the opening ceremony that as academics they were ten years ahead of the field. "What you are discussing now will become fashionable in commerce and politics," he said. "Your ideas have been accepted by Government and Opposition and environmental affairs have come in from the cold. Now the onus is on you and politicians to get the message across to students and general public."

From Professor Donald Dorman, emeritus professor of land economy at Cambridge University and chairman of the Commonwealth Human Ecology Council, came a vigorous attack on the trendy and superficial in environmental studies.

"The problem before the environmental scientist is to know how, if he is to command respect in academic circles, to devise a discipline from courses of study derived from abstractions from a wide array of subjects and organized as an academic discipline in its own right."

"To take a slice of economics and call it 'environmental economics' is only playing with names. It can rightly infuriate the academic economist and lawyer since it appears to them to disparage their true disciplines. Only minds disciplined by orthodox undergraduate teaching, he said, should attempt the knitting together of strands of knowledge which made up environmental studies."

Woolly minded international conferences had done little to help environmental science, or human ecology, to become presentable as an academic discipline, particularly when they passed resolutions calling on different faculties to combine to produce experts in environmental education.

Professor Howard Odum, of Florida University, said the area under consideration had long been the territory of humanists who saw human beings as most important and able to do anything they wanted. The fact remained, he said, that human beings were not gods, and would only survive if they did what the gods had demanded. "If they do not," he said, "the biosphere will programme some other creature which will take over."

THE THES
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Miner hiccup for the AUT

Ever eager to keep a low profile, the Association of University Teachers abstained in last week's crucial Trade Union Congress vote on the miners.

It was just bad luck that the tiny margin of 64,000 votes in favour of future Labour government bailing out Mr Scargill's union meant the abstainers were more closely scrutinized than usual and there, sitting on the fence with some school-teachers and bank workers was the AUT.

Matters were not improved when it was suggested that any one of the three unions, if they had voted with the moderates, could have saved the day. Mathematically possible for the teachers and bank workers, even wishful thinking by Mr Neil Kinnock could not have stretched the AUT's 30,000 votes quite far enough.

Which is not to say academics could not have bridged the gap - as the AUT doubtless realized while watching the college lecturers' union Natfhe quietly casting its 74,000 votes in support of the miners and ensuring the motion was carried.

Disgratification in Cheltenham, where the Polytechnic Central Admissions Service is receiving its first applications for 1986. The latest Careers Advisory Research Services guide, called 17-18-4 and written by a Bristol headmaster and an Avon careers adviser, has managed to leave out references to the polytechnic courses handbook and the PCAS guide to applicants. It also has a rather attractive flow chart showing prospects after A levels, in which the only courses apparently offered by polytechnics are certificates, diplomas and sandwich degrees.

Tall story truncated

Asics Tiger, the Japanese sportswear manufacturer had a sizeable problem kitting out competitors for the recent World Student Games, held on the firm's doorstep in Kobe.

Asics' carefully selected name - an acronym for *anima sana in corpore sano* lost a little of its impact on the tallest British swimmer, six foot eight and a half inch Newcastle University medical student Kevin Boyd, when he found his free allocation consisted of an impossibly tight pair of trunks and a robe that barely reached his waist.

Professor Barbara Clayton is the first female dean of the Southampton Medical School. Edinburgh University presented her with an honorary doctorate this year. The peroration was made by her Edinburgh equivalent - dean of the faculty of medicine Professor Gordon Whitty. Professor Clayton was no militant feminist, he said admiringly. She had "steadfastly refused to burn her bra". It was not only her intelligence and wit, but also her modesty and charm which made her so deserving of this honour.

Sir Keith makes history

As a keen student of history, Sir Keith Joseph must have derived a little extra pleasure in avoiding the reshuffle. For it means that he is now virtually certain to make a little piece of history himself. That is not, as Clive Jenkins told the TUC, to be the first minister since Idi Amin to shut down a university. But as the longest-serving Secretary of State for Education, having recently clocked up four years in a job which has a notoriously high turnover, Sir Keith now has only eight months to go to beat George Tomlinson's record from Attlee's two governments between 1947 and 1951.

Union Jack flies the flag for Scottish lecturers

by Olga Wojtas
Scottish Correspondent

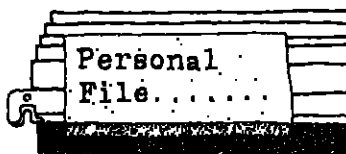
Heard the one about the trade unionist, the philosopher, the Church of Scotland minister and the academic? He's just been appointed further and higher education officer of Scotland's largest teaching union.

In two weeks, Jack Dale will end an 18-year career at Paisley College of Technology, where he is currently senior lecturer in philosophy, to take up a full time post in the Educational Institute of Scotland.

Unlike his leaving the ministry ("there was no tremendous crisis of faith: I'd had hopes of moving into academic life as a theologian"), this has not been a deliberate career move. However, he has been under a certain moral pressure to change jobs.

First, social sciences at Paisley are seeking job losses following the Government cuts of their courses, and Jack Dale's resignation will ease the pressure on the two younger colleagues in his department.

Second, as honorary secretary of the Association of Lecturers in Scot-



lish Central Institutions (membership 650), Jack Dale has masterminded this summer's merger of ALSCI and the EIS (membership 45,000). ALSCI members would have been extremely alarmed that their interests would not be safeguarded had Jack Dale not been put in charge of EIS ALSCI, which will act within the EIS umbrella.

Given current Government cuts, Mr Dale believes that the central institutions in particular, and public sector higher education in general, need the strength of a properly organized professional union which can command the attention of the Scottish Office and the educational world.

Scottish higher education, however, is divided among five unions, and the Scottish Office decision to bring the two largest further educa-



tion colleges into the central institution sector meant the prospect of staff in 16 colleges being represented by four separate unions.

The strongest was obviously the EIS further education lecturers' national section (FELNS), an autonomous group within the larger union, and Jack Dale has negotiated similar self-governing status for EIS-ALSCL.

He is too good a trade unionist to try to steal members from other associations, but he clearly believes the ideal is for the other unions also to merge with the EIS.

He will not only be responsible for EIS-ALSCL, but also for FELNS. However, he is not a tyro on further education issues, and has learned his trade under the most critical of audiences - for the past five years he has been staff side negotiator on the Scottish Joint Negotiating Committee.

His SJNC colleagues praise him for his eloquent, powerfully conducted, well presented arguments. "He's a quick thinker on his feet," says one. "The only thing is that he tends to use 20 words where three would do - but then, he's a philosopher."

He has no plans to move from his West Coast home in Edinburgh, where the EIS, headquarters are. His wife, a leading community medicine specialist, has her own career in Glasgow, he explains, where she holds an honorary lectureship at Glasgow University, therefore he should be the one to commute.

Liverpool union row erupts

by David Jobbins

Trades Union Congress officials are to try to sort out an inter-union dispute over who should represent clerical staff at Liverpool University.

The dispute could endanger the long-standing "spheres of influence" agreement between the university unions and the vice chancellors if the clerical staff insist on sticking to their decision to join the Association of Scientific, Technical and Managerial Staffs.

Jenkins was in Liverpool earlier this year to attend the amalgamation ceremony after white-collar staff voted overwhelmingly in a secret ballot to merge their staff association with his union.

But the merger has led to a complaint by the National and Local Government Officers Association to the universities' central council for

non-teaching staff that the spheres of influence agreement laying down which unions should normally represent specified sections of the workforce has been breached.

Following the refusal of ASTMS to back down, the secretary to the trade union side of the central council, Mr Alistair Macrae, has referred the dispute to the TUC as a potential breach of the Bridlington agreement governing relations between unions competing for similar workforces.

The staff association at Liverpool, which was founded in 1965, voted by 225 votes to 72 out of a total membership of 425 to become part of ASTMS but distinct from the union's branch representing technicians at the university.

Its then general secretary, Mr Brian Sout, said last week: "As a certificated independent trade union we consider we had the right to choose who - if

anyone - we joined. Obviously we chose what we considered to be the better body."

But Mr Macrae said Nalogo was recognized as the appropriate union for clerical staff. "If ASTMS had wanted an adjustment to the spheres of influence agreement they could have asked for one. But what they did was to go ahead without such an approach."

Nalogo's national universities officer, Mr Alec Thompson, said: "We have objected to the TUC and to the central council. The spheres of influence agreement was drawn up under TUC auspices, and has been recently reaffirmed by the university employers. ASTMS' attempt to undermine it puts into serious jeopardy a system even the vice chancellors have accepted."

The TUC is expected to hold informal discussions to try to conciliate between ASTMS and Nalogo.

NUS promotes benefits claim

Students are to be encouraged to claim their full social security entitlement as part of a campaign against wholesale changes in the state benefits promised by the Government.

This term the National Union of Students is to attach a high profile to its "Claim it while you can" campaign and expects that thousands of students will apply for housing and other benefits, lower prescription charges and help with travel costs for higher education students.

NUS vice president Ms Vicky Phillips said: "If people do not claim and resist Fowler this year, they may not have any benefits to claim next year."

Last year NUS ran a "Claim it while you can" campaign which won a number of significant victories, particularly over discretionary awards. This year, the new element is the suggestion that students whose claims for travel costs have been refused should demand a hardship grant.

PM praises ALBSU

The prime minister, Mrs Margaret Thatcher, this week paid tribute to the work of the adult literacy movement in Britain, on its tenth anniversary. A message from Mrs Thatcher conveying her congratulations and recognizing the "considerable achievements of the Adult Literacy and Basic Skills Unit and its predecessors was read to a reception to mark the anniversary on Tuesday by Sir Keith Joseph, the Secretary of State for Education."

Sir Keith went on to add his own commendation, praising the strength of the partnership between the unit, local education authorities and volunteers which had resulted in such an overwhelmingly successful literacy programme.

He reminded guests at the reception in London that 10 years ago literacy students numbered 10,000 and only half of local authorities provision for adult literacy tuition.

Now, every local authority provided a programme and currently 100,000 students were undergoing tuition. During the decade, more than 300,000 students had received instruction, Sir Keith said.

"We must not forget the great achievement of those receiving tuition, as well as those who provide it," he added.

Referring to ALBSU's current plea for funds to conduct research into the effectiveness of literacy projects, Sir Keith said he would be interested in hear further details.

Correction

The committee of the National Advisory Body, at its meeting last week, discussed the desirability of making joint allocation of teacher training places between Wolverhampton Polytechnic and the West Midlands College of Higher Education, not the withdrawal of the polytechnic's places as stated in last week's *THES*. A joint allocation was approved.

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- Public Law/Law and the State

Full-time students are also invited to apply. No financial grants are likely to be available from the Polytechnic, but there are a small number of research associate posts where fees may be waived and payment made for part-time teaching.

Please write or telephone for further details and an application form, quoting ref BSM/LAW, Research Office, Middlesex Polytechnic, 114 Chase Side, London N14 5PN. 01-888 6589.

Middlesex Polytechnic

Karen Gold reports from the Social Democratic Party conference in Torquay

Delegates told of WEA crisis

The Workers' Educational Association is facing the severest crisis in its 80-year history, Mr Jack Taylor, assistant national director of the WEA told a fringe meeting.

The Department of Education and Science was making an 8.3 per cent cut in the association's £2.4 million annual budget, in a time of cuts in adult education spending by local education authorities and university extramural departments, he said.

But it was also insisting that grants to WEA districts should be related to the output of students, undermining rural, innovative and specialist work, and making districts compete against each other for money.

Mrs Anne Sofer, SDP member of the Greater London Council and the Inner London Education Authority, said the amount of money being cut from the WEA was peanuts in terms of the national education budget.

"The general squeeze from the centre is so severe that nothing escapes, however small and however useless the suffering, like that the WEA is going through."

The SDP was close to the WEA in its philosophy of liberal education as something everyone in an advanced democracy should be able to enjoy. But the distinction between liberal and vocational education was outdated, she said. "With different patterns of work and leisure, what were once hobbies and work were now converging."

SDP aims to improve access

Policies outlined in the Government's Green Paper on the future of higher education would end up making access to higher education more difficult, the SDP education spokesman Mr Michael Hancock, MP, told the conference.

"Who would decide if the benefits of education would be worth the cost, as the Government had expressed it in the Green Paper?" he asked, winding up the party's debate on higher education.

"How will you define which people are going to have the ability to benefit? The system will penalize candidates who will fall at this added barrier. It is not acceptable in a modern democracy that such a limited segment of the population should benefit from higher education."

The SDP's policy for higher education would include education benefit grants to encourage 16-year-olds to stay on at school, and two-year general degrees which would attract many people who would not otherwise consider higher education. The party also believed that teaching and research could to some extent be separated, and that a nationally defined research programme could then be established.

The SDP would encourage greater company and industrial involvement in research through grants, but such involvement would be in addition to Government support for research, he said.

The present situation where alphabetized research projects could not get funded was a nonsense, said Mr Hancock. In Portsmouth, his constituency, the funding problem was so bad the polytechnic had a new £1.5 million library extension but could not afford to buy books to put in it.



Michael Hancock: mobilizing public opinion

But public opinion on education had to be mobilized. "This Government can do what they have done and will continue to do it because they simply don't believe there are any votes in education."

The conference carried without discussion a motion condemning the Government Green Paper for its lack of clearly defined strategy, short-term market considerations and failure to improve access. It called for more access, more part-time provision and an end to the cuts. But it supported the Green Paper's insistence that student unions must be committed to free speech.

The Green Paper was negative, divisive and failed to recognize it was

Government's job to provide the means to make higher education contribute to the well-being of the nation, said Mr Don Gamper, North Humber-side.

"We don't view higher education as essentially a drain on the productive parts of the economy for which the minimum possible funding is grudgingly to be provided," he said. The party supported the move towards more science and technology, but properly funded.

The Social Democrats had talked a lot about low morale among school teachers, but morale was also low in higher education, said Mr Adrian Vinson, a Southampton University lecturer.

Rate-cap threat to jobs

by Olga Wojtas
Scottish Correspondent

Further education lecturers in Strathclyde Region could face compulsory redundancies because of the region's "financial straitjacket", the committee of Strathclyde's further education sub-committee has warned.

Councillor Joe McLean, speaking at a council meeting of the Scottish Further and Higher Education Association in Glasgow, said the region had a policy of no compulsory redundancies. But over the next six months there would be considerable pressure to reduce the region's staff spending bill and earmark lecturers "surplus" requirements in their particular field.

The region, which has exceeded Government spending guidelines by £41 million, could lose between £1 million and £100 million through rate-capping at the beginning of next financial year.

With the decline in traditional industries in the region, a number of further education courses for example those connected with shipbuilding, are no longer viable. But the region is currently retraining staff through in-service courses in computer studies and electronics, said Mr McLean.

Delegates did not seem unduly alarmed by these predictions, and the SFHEA general secretary, Mr Graham Allison, said later that Strathclyde had managed to accommodate Government clawbacks in the past. It was still not clear whether the council's ruling Labour group, which faces elections next May, was simply crying wolf, he said.

However, delegates did attack Councillor McLean over the region's policy of encouraging adults to attend courses in schools, when these were also available in colleges.

Councillor McLean said that there was no evidence of intake decline in colleges, and that adults gaining qualifications in schools would inevitably mean a subsequent enhanced uptake of college courses.

But one lecturer claimed that enrolments in courses run by his college's community education department had dropped by 60 per cent as a result of adults attending schools.

Other lecturers maintained it was not in the adult's best interests to be taught in schools since teachers did not have the expertise of further education lecturers in educating people from a range of different backgrounds.

The SFHEA also criticized the region for charging fees for college courses, while similar courses in schools were free. "The cynical might suggest that what you're really trying to do is doctor falling rolls in schools," said one lecturer.

But Councillor McLean said it was coincidental that Strathclyde's policy on free access to school had evolved at the same time as falling rolls. It was also the region's long-term policy to abolish all fees for further education, he added. Currently, young people at school received no funding, but their going to college since they would then have a bursary. "It's swings and roundabouts," he said.

● The SFHEA voted at its council meeting to reject any pay offer, expected at the end of this month, which does not include a commitment to restore losses in salary since 1974.

Power of five

New computing equipment worth £1.8m is being installed in the universities of Durham and Newcastle paid for by a grant from the Computer Board for Universities and Research Councils. It will be smaller in size but provide five times the current computing power. The universities also plan to install new high speed local network links within the next year.

Oman deal

A joint venture between Sunderland Polytechnic and Weirside College has landed a multi-million pound contract to train laboratory technicians at a new university in Oman. The training package is part of a £65 million contract to supply educational equipment and training for the Sultan Qaboos University.

Keith Hampson

The author is Conservative MP for Leeds NW.

Cash controls mean fewer Nigerians

by Paul Flather

The number of Nigerian students coming to study in Britain is set to decline as exchange controls imposed by their government make it increasingly difficult for them to pay course fees.

In March and again in May the Central Bank of Nigeria issued a blacklist - mainly of private colleges and tutors for which exchange facilities had been suspended leaving thousands of Nigerians stranded in mid-course, uncertain how they would find the necessary fees.

However, it seems that most students managed to stay on their courses, finding alternative sources of money, or coming to some arrangement with their colleges. Others transferred to equivalent courses at universities, polytechnics or public sector colleges not on the blacklist.

But private colleges are now reporting fewer students registering for new courses, and there are fears that the students may be driven to other countries which have so far escaped the close scrutiny of the Central Bank.

The British Council estimates there are some 4,000 Nigerians in public institutions in Britain. At least another 4,000 are in private colleges according to the United Kingdom Council for Overseas Student Affairs. The Nigerian High Commission, however, has put the total figure at more than 10,000.

One blacklisted college, City Tutorial College in London said this week the number of Nigerian students registered for the new year was 40, down from 50 the past year, and a peak of 120 a few years ago. The students now also have to pay one term's deposit in advance.

Mr Gabriel George, the director of studies, said: "We have had to show a great deal of flexibility. There have been long delays in getting money through from Nigerians. We are obviously wary of accepting Nigerians and we are now getting fewer and fewer applications."

City Tutorial College, in common with a number of other colleges on the blacklist, has been forced to keep up numbers by looking to the Middle and Far East. It has decided not to run courses for which only Nigerians apply.

In recent years a number of private London colleges, including the Brookwater College of Banking and the City Commercial College, have been forced to close in part because of unpaid fees from Nigerian students,

though other commercial pressures were also involved.

UKCOSA said the blacklist had caused a great deal of confusion. Mr Andy Masheter, an assistant executive secretary, said Nigerians still regarded an education as prestigious. However this could change if students were forced by the blacklist to go elsewhere. Mr Brian Rawl of the Institute of Bankers expressed concern that trading links could be undermined if fewer Nigerians came over for banking courses in London. Some 750 took banking courses this year.

The Nigerian High Commission said the controls had been brought in to prevent students going abroad to do courses that were available in Nigeria. The aim was to save money and stop students taking "luxury" courses.

Electronic scheme goes ahead

by Carmel McQuaid

Across-border EEC scheme, aimed at improving the engineering industry in both Northern Ireland and the Republic, started on a trial basis for one year last October, has been given the go ahead for a further year.

Known as the Electronic Entrepreneurs Programme, it has involved three electronic engineers from Queen's University, Belfast, and four from the National Institute of Higher Education in Limerick, who have been taught the intricacies of a profit and loss sheet, the function and structure of a limited company, how to run and plan a firm and how to argue their financial prospects with a view to getting project funding while carrying on with their own work.

Mr Eamon Vernon, of the Wolfson unit at Queen's said: "There is no point in having a finished product on the work bench if the engineer lacks the business acumen to ensure it gets to the market place, and to its optimum slot there."

The scheme was conceived by Dr Fabian Monks, director of the Wolfson unit, and his fellow electronics expert, Tom Carroll, from the Limerick Innovation Centre who, as visiting professor at Queen's over three months, saw an opening for EEC funding.

A formal request was made for assistance from the European Social Fund, which resulted in an undisclosed sum being made available, on condition that the indigenous engineering industry in both places would benefit.

Special significance was attached to the cross-border aspect, which entailed two students from Limerick coming to Belfast in turn for a week in February and June, while the Queen's students worked in Limerick for two weeks in November. This ensured experience of very different business milieux, since affairs in the Republic are geared to the American model, in contrast to the British techniques operating in Belfast.

All the students have succeeded in finishing, complete with financial documentation, the manufactured invention they sold in idea form to their supervisors before being accepted for the project.

The only qualification for entry is a good degree along with a bright idea, which must be related to manufacturing rather than service. Each is paid £3,000 salary and a further £1,000 for equipment, while a fee also goes to the lecturers who supervise.



Eco-mishap in poly's 'back garden'

A team of researchers from North East London Polytechnic's Environment and Industry Research Unit (above) is helping to salvage the River Roding and restock it with fish following a major pesticide spillage.

Researchers at the unit have already advised the London Wildlife Trust on how to revive the river and have now been asked to take part in the long-term recovery programme.

Dr Paul Birch, the unit head, said: "We are undertaking an increasing number of local environmental projects, and the Roding is particularly

important because it virtually runs through the polytechnic's back garden."

The accident happened when a lorry carrying pesticide crashed on the A11 motorway five months ago, spilling a large quantity of its cargo into a culvert under the road.

Within minutes 45 gallons of chemicals flowed into a nearby brook and from there into the river. A spokesman from the London Wildlife Trust said: "The spillage has wiped out the Roding's fish and insect population and has upset the ecological balance that the river is in danger of becoming an open sewer."

Disaster funds set aside for burns research unit

Some of the proceeds from the chart-topping record brought out in the wake of the Bradford City Football Ground fire are to be used to set up a Plastic Surgery and Burns Research Unit at the University of Bradford.

Among the first patients at the new unit - to be based jointly at the School of Biomedical Sciences at the university and at St Luke's Hospital - will be survivors of the football ground fire who need extensive courses of skin grafts.

Days after the fire, Gerry Marsden and The Crow brought out a record of the famous football song, *You'll Never Walk Alone*. The disc sold 500,000

Bank rejects NUS claims

Barclays Bank this week hit back at plans by student leaders to pillory it for its involvement in South Africa and claimed it was an innocent victim.

Action planned by the National Union of Students for October 24 is expected to involve thousands of students in a picket of Barclays branches on campuses and in university and college towns.

But a bank spokesman said: "We are sorry that NUS feels it has to resort to such action to make it views known."

He pointed out that for commercial reasons Barclays had ceased to be a controlling shareholder in the South African based Barclays National Bank, reducing its holding from a controlling 50.4 per cent to 40.4 per cent.

Barclays has expressed its total opposition to apartheid and believes that as a major shareholder it can exert a force for the good, by influencing the National Bank's commitment to multiracial and equal opportunities policies.

The bank admits that its share of the £1 billion student market did fall in 1984 but claims this was due to commercial rather than political factors. Other banks were committing larger budgets for incentives to encourage new student businesses, or had greater levels of representation on campus, a spokesman said.

Apart from the Barclays picket, NUS is organizing a picket of the South African embassy on October 19.



Showdown for cowboy colleges

This is the time of the year when the unacceptable face of employment policies in further and higher education is brought home with a vengeance. Officials are inundated with calls for help from those whose temporary contracts have expired and not been renewed, and those members who have enjoyed, sometimes for many years, substantial employment on a part-time basis, finding that work is no longer available.

Despite increasing experience of redundancy caused by financial cutbacks or course closures, lecturing is still regarded as a relatively secure form of employment and most staff working in the sector have an expectation of continuous employment and job security. Many lecturers are unaware of the rapid growth in the use of temporary contracts in the sector or the pressures which are turning many full-time posts into part-time work.

Obviously there are occasions when the use of temporary contracts or employment on a part-time basis is legitimate and sensible. People may be standing in for those on secondment, taking maternity leave or some other form of absence from a post to which they intend to return. Similarly there can be legitimate reasons for the use of part-time appointments and academic provision in colleges, by facilitating the employment of staff who at other times in the week are practising their respective trades or professions.

Recently, employers and college managements, perhaps encouraged by the competitive free market forces which we are told will make colleges more effective institutions, are seeking both to increase the use of temporary contracts for posts which are clearly needed on a permanent basis, and to increase the proportion of work in a college which is done by part-time staff.

We now have the situation where some people find that their so-called temporary contracts are renewed annually - often, if Naffie does not intervene, for five or six years in succession. To add insult to injury many are also required to sign away, as part of their contract, their statutory rights under employment legislation, eg to appeal to industrial tribunals against unfair dismissal.

This insertion of waiver clauses is a favoured strategy of "cowboy" employers who seem unable to differentiate between positive management and discreditable employment practices. The best that can be said about those who employ and manage by these methods is that they have never received any proper management training.

Insecurity of funding - when has it been otherwise? - or the involvement of the MSC are frequent excuses for such employment practices. Some even attempt to persuade us that they have widespread support in the colleges because people on part-time or fixed term contracts can easily be sacked in the event of redundancies being needed!

During the 20th century many unions organizing manual workers fought long hard battles to decasualize their industry; the docks and agriculture. In education, in contrast, the casualized work force at dock or factory gate has been transformed to a new setting. As a tribute to progress I suppose you can claim you get a better class of lump these days!

Jim Munnery

The author is assistant secretary (salary) of Naffie.

Teachers' training rapped

Only one in six third-year trainee primary teachers at St Mary's College, Twickenham, is being trained to teach art, despite the fact that the subject is a crucial part of the junior school curriculum.

This observation was made by HM Inspectors in their recent 40-page report on the college, which specializes in initial teacher training. They say: "Art is a subject which all primary teachers are expected to teach and it is a cause for concern that so few students in the college receive appropriate training."

They explain that reduced student numbers led to a rehousing of the art department in a smaller area described as "two converted workshops which admit little daylight." The inspectors say: "The need for better accommodation may offer some explanation for the poor quality of some third year professional and school-based work which was seen."

They record an increase in the number of second years getting art

training - 33 BEd students out of 106, 62 of whom are training to teach in primary schools. This is partly attributed to changes which are being made to the structure of the BEd course.

The inspectors observe "a good dards at the college. They say: 'Students' written work showed that the main points of the areas under consideration had been understood but that more time and attention should be given to the development of analytical skills.'

They conclude that students on placement have good access to a range of schools in the London area, but they fear that in their fourth year BEd students do not get enough teaching experience.

The inspectors observe "a good community ethos" at the college, and believe this responsible for keeping down the drop-out rate. Of the 1983 graduates, 43 per cent of the BEd students and 54 per cent of the PGCE students found permanent teaching posts by the following December.

Staff 'aware of limitations'

Constant reforms and revisions to the BEd degree, but adds that the West Midlands College of Higher Education shows that college staff are aware of the current limitations of the courses, according to a new report on the college from Her Majesty's Inspectorate.

The report praises the college for developing a well organized system for teaching practice for all courses "conscientiously carried out", and notes that staff are academically well qualified and particularly supportive of students' welfare needs.

But the report also pinpoints a number of limitations which still need attention. It welcomes a new guided options system introduced into the BEd degree, but adds that the absence of religious education for all except those following a main religious studies course is a cause for concern.

On the first-school postgraduate course, the inspectors say there is an imbalance between the time allocated to mathematics and to language and reading work, and that the absence of

humanities is again a matter of some concern.

The secondary course has suffered because the subjects on offer have been reduced to four - history, French, mathematics and physics or chemistry. The inspectors note as a matter for regret the absence of biological science. The report acknowledges a new course framework is planned.

Overall the inspectors urge the college to pay more attention to the quality of some of the schemes of work drawn up by the students, and to more rigorous assessment of the performance of some students during their school practice.

On the plus side, the report says the college had redeployed its staff of 72 well after losing 40 through early retirement and voluntary redundancy in the past three years. It also noted that the college was well resourced, with the library described as "exceptionally good". It seats up to 260, is open 9pm, has six qualified librarians on hand, and a newly equipped computer suite of three rooms.

PARTY LINE

Lacking democracy: a demonstration

Poor Fred Jarvis. The whole-hearted support given by the Trades Union Congress to further lightning bolts of taxation by the National Union of Teachers was heavily overshadowed by more fundamental questions at Blackpool. I might add in passing that the long summer break has seen the teachers lose momentum and parents likely to find the NUT's intransigence hard to take in the coming months.

Also, when considering that key question of the day - whether it is the Government's policies or their presentation which is responsible for the slide in the polls - one might consider the inability to establish that under the last Labour Government the teachers were left 11 per cent worse off by 1979 than at the time of the Houghton Award in 1974. It has been runaway inflation during the Labour years, not the present Government's approach, which has caused the severe erosion of teachers' pay.

What the TUC has been about this year is democracy - or the lack of it - in the trade union movement. TUC policy, not realized through a majority vote and determined by men usually not elected by secret ballots, is that Government money for postal ballots should not be accepted.

Yet the engineers' members decided by 12-1 that Government

money was a useful bonanza. The majority in Blackpool seemed to believe the law of the TUC is superior to the law of the land or the wishes of a democratic majority of the union. Rather strange, one might think, when one remembers the impotence of the old TUC carthorse faced by powerful union bosses.

Self-interest if not common sense eventually prevailed. Union membership is falling drastically and financial losses came into the equation if big unions were to walk out. So in the end, the kind of uneasy short-term fudge so beloved of both the TUC and the Labour Party was hammered out in smoke-filled rooms. To those nostalgic for the 1960s it was quite like old times.

And for the prime minister it provided a convenient reminder for the public of what the real alternative is.

In terms of the TUC's public image it was a disaster. The settlement failed to hide the essential anti-

democratic stance of many union bosses. The reason they are against one-man one-vote is that they know they would find it harder to get away with extreme policies. Witness Arthur Scargill's dispensing with a lengthy ballot in his final challenge to the Government after he had twice failed to bring out the miners on a vote.

The TUC will find it increasingly difficult to deny its people democracy - and survive. The trade union movement has had democracy thrust upon it by the Thatcher government. And its individual members will willingly go back to allowing others to take decisions for them or to running the risk of intimidation in the show-of-hands farces which passed for union democracy in the past.

But some of the left are more subtle these days... political propaganda is costing the ratepayer some £20 million per year; the GLC alone overspent £10 million last year. Hundreds of odd-ball leftwing groups

have been milking the ratepayers and a growing army of leftwing activists in one council are being hired as supposedly independent council officials by neighbouring authorities. It is more insidious than the old left tactics and may be more successful. But when Labour councils claim they have not the money to buy school-books or look after the poor and the elderly, just check how much they are spending on promoting themselves and their causes.

Can the "new" Cabinet convince the electorate that what these people are up to in local government is only a rehearsal for what they will do at Westminster should they win the next election? For isn't it the case that GLC stands for Gone Looking for a Constituency?

Keith Hampson

The author is Conservative MP for Leeds NW.



President Mejia Victores

Troops sent in to put down protest

by Colin Harding

Troops backed by armoured cars invaded Guatemala City's theoretically autonomous national university campus last week in an unsuccessful attempt by President Oscar Mejia Victores's military regime to quell protests against the latest round of economic austerity measures.

After a week of rioting, in which buses were burned and city centre shops looted, the government reluctantly rescinded a 50 per cent bus fare increase, agreed to freeze the prices of basic necessities such as bread and milk and offered wage rises to public sector workers.

The government laid much of the blame for the disturbances on the State University of San Carlos (USAC), which has frequently been the butt of brutal repression by a succession of rightwing military dictatorships. This year alone four university teachers have been shot dead; five USAC students have been killed since mid April and 10 have disappeared, victims of officially condemned death squads.

USAC has been accused of harbouring and recruiting left wing guerrillas, who have managed to survive despite a counter-insurgency campaign of unparalleled ferocity over the past five years.

Troops withdrew from USAC after two days, claiming that they had discovered weapons, ammunition, drugs and subversive literature. This was flatly rejected by the rector, Dr Eduardo Meyer Maldonado, who called the occupation "one of the blackest, most irrational and most illegitimate acts of this administration". Both USAC and all Guatemala's City state primary and secondary schools remained closed.

Last week's rioting often began with student-led protest demonstrations, but rapidly spread to the poor districts surrounding the capital. Guatemala is going through a severe economic recession, which the government has attempted to deal with by orthodox means, including price rises and wage restraints. At the same time it has been forced into a series of humiliating retreats by Guatemala's well-entrenched interest groups, which earlier this year obliged it to drop proposed tax increases.

More doors open to foreigners

The Chinese Academy of Sciences in Peking has announced that it has now opened up 19 more higher education research institutes to foreign scientists, researchers and students wishing to engage in research and study in China.

Among others, the institutes recently opened to overseas scientists include the Institute of Mathematics, the Theoretical Physics Institute and the Institute of Mechanics in Peking; the Ion and Infra-red Physics Laboratories in Shanghai, and the laser spectrum laboratories of the Anhui Institute of Optics and Fine Mechanics.

The academy said that opening up China's research institutes to overseas scientists, researchers and students was an important part of current educational reforms.

Segregation angers students

by Geoffrey Parkins

New undergraduates in three of Malaysia's universities have been segregated from senior students in an effort to prevent them falling under the influence of extremist political factions.

The policy, which is expected to last for over two months in some universities, includes separate dormitories, placing new undergraduates under constant guard to prevent them mixing with older students and strict instructions not to speak with senior students when in canteens, lecture theatres and in other parts of the campus.

At the University of Perak in Malaysia in Kuala Lumpur, 2,500 new students are segregated in this way. Senior UPM students say they are bewildered by the university Student Affairs Department's actions. Notices about student meetings, societies and clubs have been "torn down" from noticeboards by guards and members of the students union, they said.

The university has experienced considerable student unrest in recent months. Earlier this year extremist factions within the university created

an incident involving the suspension of 16 female students for breaking university regulations on the wearing of veils. The incident developed into a public political row involving outside religious and political leaders.

Senior students are complaining that it is virtually impossible for them to behave normally.

Deputy vice chancellor for student affairs, associate professor Dr Kamaruddin Haji Kachar said the segregation policy was part of the university's "orientation programme" for new students, and had been extended a further three weeks. During "orientation", said Dr Kamaruddin, seniors and new undergraduates are kept well apart, but this was necessary to prevent the orientation programme being "obstructed" by certain extreme senior students.

The segregation policy has also been adopted by a number of other Malaysian universities, including the University of Sains Malaysia in Penang. At the Institute Teknologi Mara (ITM) in Shah Alam, its director Nik Abdul Rashid Majid told 750 new students attending an orientation course, to

"beware of extremists" who would "brainwash them with negative ideas" about the university, the Government and the country.

In the last academic year alone (1984/85), no less than 876 students from the Institute Teknologi Mara were dismissed for reasons ranging from violating assessment regulations to engaging in undesirable political activities. The institute's director made it clear that standards would be upheld.

Education Minister Datuk Abdullah Badawi, speaking on the issue in Kuala Lumpur last week, made it clear that the government gave full support to universities and colleges who tried to "protect" new undergraduates from religious or political extremists.

The Malaysian education ministry has announced that under the Fifth Malaysian Plan it intends to reduce the need for so many students to study overseas by improving and increasing the number of schools, colleges and universities.

The plan involves setting up more primary, secondary, technical and vocational schools.

Rabies in Britain prediction

from William Norris

WASHINGTON

A prediction that rabies could spread to Britain within 10 years is being made by an English mathematician working as a visiting scholar at Los Alamos National Laboratory, New Mexico.

Dr James Murray, director of the centre for mathematical biology at Oxford, has constructed a model tracing the spread of the disease through Europe over the past 40 years. From the first modern outbreak near the German-Polish border during the Second World War, rabies has moved westwards through Europe at up to 60 miles a year. Murray's mathematics forecast that it will soon reach the north coast of France, and once there he believes that not even the UK's strict quarantine laws will be able to prevent it crossing the Channel.

"The virus is unbelievably effective in its propagation," he says. "A pet could contract the disease, arrive in England, and spread it around." And pinpointing the carriers would be difficult. The typical symptoms of rabies may not appear for more than three months.

A man of many parts . . .

At the age of 51, Louis Bonasio is not the man he was. Eleven years ago he was admitted to the medical centre at Stanford University and became the first recipient of a heart transplant. Then both his hip joints were replaced with stainless steel, and now Mr Bonasio has been back again - this time for a second heart transplant. He is the first person in the world with transplanted organs from two separate donors.

Dr Nicholas Feduska, of the University of California, San Francisco, who performed the kidney operation, said this week: "The Medical and

scientific implications of this patient's case are fascinating. He demonstrates that patients with life-threatening diseases affecting multiple organ systems can benefit from multiple organ transplants."

Mr Bonasio has made a dramatic recovery from the latest operation. He has been released from hospital after only three weeks, and looks forward to resuming his normal lifestyle of what he calls "constructive leisure". Constructive leisure in Mr Bonasio's case includes hot-air ballooning, motor-cycling, fishing and hiking.

More enthusiasm than expertise in Chinese Sovietology

Soviet studies in China - a field of research only reintroduced in 1978 - are being considerably hampered by a lack of fluent Russian speakers. Following the break in Sino-Soviet relations at the end of the 1950s, Russian was not taught in China for 20 years. Now Sovietology courses have been introduced, but researchers are hampered by their lack of skill in reading the source material.

Soviet studies in Chinese universities and research institutes concentrate on five main fields: international relations (Soviet-US, Soviet-Europe, Soviet-Third World), the development of the Soviet model of Marxism, the political-economic might of the Soviet Union, sociology and science-technology. The last is considered particularly topical - recent government and party directives urged the research and development sector to make "special study of Soviet experience in assimilating Western technology, with particular attention of what not to do".

The various establishments of the Chinese Academy of Social Sciences (both the central complex of Peking and the provincial centres) have institutes of Soviet studies, and virtually every university in northern China has either an institute or a group working on some aspect of Soviet studies. In addition, the specialized research institutes of the new production ministries have research teams concentrating on the relevant aspects of Soviet science and technology.

But the "experts" in these groups are mainly elderly, having either learned their Russian during the period of Sino-Soviet cooperation (1949-1958) when there were numerous Chinese in Soviet universities, or else Chinese in Soviet universities, or else of China after the revolution (or from their pupils).

The latter group are particularly ill-equipped to deal with modern Russian. Not only did their tutors (or, in many cases their tutors' tutors) rigorously avoid all Soviet neologisms, in

many cases the original Russian tutor was not qualified to teach at all, since the remnants of the White army included not only well-educated officers, but also semi-literate private soldiers and camp followers, who, later, tried to eke out a bare living by giving Russian lessons.

Last month, Peking radio launched a crash "brush up your Russian" course, ostensibly aimed at those experts trained in the Soviet Union in 1950s, but primarily directed (although current policy will not allow specific mention) to those whose knowledge of Russian is ultimately derived from the "Whites".

Another disadvantage for Sovietologists is that they find it difficult to keep in touch with the work of their Western counterparts. For years there have been virtually no funds available for the purchase of Western academic journals in any field, and although in July it was promised that more funds

would soon be available, most Chinese scholars treat this with considerable scepticism.

Moreover, Western universities and learned societies are unwilling to send their publications to China gratis, and for Sovietologists exchange arrangements are impossible. For although according to one informant, China publishes about 1,000 journals on Soviet and East European Studies, these are all for internal use, and carry a special imprint on the back page "published only within China".

During the last few years, indeed, Sino-Soviet student exchanges have been resumed, but the scale is tiny, particularly in view of the size of the populations involved - 10 persons from each side in 1983/84, 100 in 1984/85. To bridge the gap, the Chinese are now trying to negotiate exchange agreements with Western countries such as Canada which has a well-established tradition of Soviet studies.

Every one he knew was becoming a

Election policy differences

from Donald Fields

Striking differences in attitudes to higher education can be discerned among the parties contesting next Sunday's general election in Sweden, with sharp lines drawn between the two largest - the social democrats and the conservatives.

It is important to bear in mind the unified structure of post-secondary education achieved by the current orientated reform of 1977. This brings universities and colleges under the common rubric of *högskolor*.

Evaluating how the smaller of these institutions should be run, the opposition conservatives offer a decentralized pattern under university jurisdiction while the social democrats, governing party since 1982, favour a more regional approach. This is paralleled by the social democratic view that intermediary administrative boards placed between the central authority and each seat of learning have "done a useful job in linking education planning and regional development".

The conservatives want to scrap them as "unnecessary bureaucracy". Predictably the conservatives are in favour of the financing of research by business, with the proviso that "it be safeguarded". On the vexed issue of student finance the Social Democrats admit that "certain" students cannot make ends meet and are caught in a debt spiral, and take credit for setting up a committee to investigate the problem. The conservatives want the small grant element discontinued and the money used to boost the maximum available loan.

The social democrats are seeking a fresh term, either as the majority government or with the acquiescence of the communists who are independent of Moscow. Preferring to call themselves moderates, the conservatives hope to rule in coalition with the centre and the liberals.

The absence of a broad common platform between the non-socialist parties is also evident in their approach to higher learning. With its roots in the countryside the centre disagrees with liberal and conservative plans to scrap regional boards. It advocates a limited form of student salaries and hopes business does not become "dominant" in research; on the latter point the liberals say the state's contribution should not be allowed to decline.

The liberals and communists appear most generous on the student finance question. A few student votes could help both parties to cross the 4 per cent threshold needed to qualify for the Riksdag.

Higher education has been far removed from most election hustings through university entrance and student finance have excited some off-stage interest. The non-socialists continue to highlight the importance of an entrance examination, which is down played in the left's championing of equality of opportunity.

Charity which began in the ivory tower

Britain's universities still face the accusation that they are ivory towers, remote from the harsh realities of life. What the critics tend to mean is that universities provide a haven for scholars of ancient Hebrew and medieval Scots, when everyone knows what the country needs is more plumbers.

But it is also true that universities do not have a strong record of involvement in local social problems except at the most abstract level. One body, however, which no one can accuse of a cloistered existence is Edinburgh University Settlement, a voluntary organization through which university staff and students confront problems in the community, and offer practical help.

University settlement first emerged around the turn of the century when students and staff, conscious of their own privileges, determined to work in disadvantaged areas. But over the years, the majority of settlements have lost their historic links with their universities, and indeed many folded in the early 1960s when they seemed to be outdated by a model welfare state.

The settlement in Edinburgh, which this year celebrates its 80th anniversary is perhaps closer to its university than any other settlement in the country. The first settlement, Toynbee Hall in east London, still very much a thriving organization, was founded by Oxford and Cambridge. But they had to go beyond their local communities to find the same level of deprivation which Edinburgh University faced within a few hundred yards of its doors.

The university's main campus is bounded on one side by the Pleinence, designed as a slum clearance area since the war, and the Grassmarket, still the centre of hostels for the homeless. The settlement's director, Nick Flavin, an irrepressible Irishman from Tipperary, firmly believes that its work is inextricably linked with the university. The criterion for any new project must be that it enables the university to channel its energy in an attempt to resolve social issues in the community.

The need for an organization like the settlement is probably as great now as it was in the 1930s, he adds, although the problems are more subtle. "People are not exactly starving,

but through the media and advertising, affluence is more taunting." The universities may now be confronting their own financial problems, but these have beset the settlement throughout its history. Nick Flavin points out, and he believes it crucial for Edinburgh to maintain its charitable work.

"Universities can address themselves to justice, not charity in the patronizing handing-out sense, but the true charity of giving their time."

Volunteer work, however, has changed from a decade ago, when a former director could boast that at any time he could find 1,200 students to do anything. The rise in unemployment means that work traditionally done by students as a back-up for social work departments, for example gardening and painting for the elderly, are now tackled by Manpower Services Commission programmes.

Fewer students now volunteer, but Nick Flavin firmly believes those who do are often of higher calibre than in the past. The settlement now attracts students who hope to gain something from their work, perhaps building up a curriculum vitae for a future job.

The settlement encourages students to take responsibility for projects, and to take managerial roles. But this does not imply that its work is paternalistic. In the past, staff and students tended to go out to the community, says Gló Harris, another of the settlement's nine full time staff. But now most of the initiative comes from the communities themselves.

It was local demand which resulted

Olga Wojtas looks at the work of Edinburgh University Settlement, a voluntary organization now in its 80th year

Nick Flavin and Gloria Harris of Edinburgh University Settlement



in Microbeacon, a centre offering an introduction to microcomputers and basic programming, intended principally to help school leavers who have not found jobs, or unemployed people who need to learn new skills.

The settlement's walk-in numeracy centre, founded three years ago, has over forty tutors offering individually tailored education. They envisaged their work as helping the socially disadvantaged to count or tell the time, but found some of last year's 1,000 students seeking information on more esoteric topics such as differential calculus.

One of the settlement's greatest achievements was pioneering the adult literacy campaign in Scotland. Initially, such a campaign was thought unnecessary since Scotland prided itself so much on its education system. Nick Flavin confesses. However, the settlement, largely through its founding of social clubs for the mentally ill and handicapped, discovered that literacy was far more commonplace than anyone had suspected, and during the 1970s, it mobilized students, teachers and administrators to develop a tuition service.

The settlement has a remarkable record of pioneering work in its 80 years: among other initiatives, it formed the first mothers' club, the first health visiting centre, the first unem-

ployed workers' centre, and the first college of adult education.

The Kirk o' Field College currently includes courses for parents and teachers on non-sexist education for children; advice on campaigning, fund raising and publicity to enable local organizations to become more effective; and setting up co-operatives as an alternative to unemployment. The settlement sees mental health and unemployment as key areas for action, but in the past it ran a club specifically for the mentally ill, its emphasis is now on integration. The university has recently refurbished the settlement's community centre which earlier this year hosted a much-praised play by a mentally handicapped theatre group.

"We don't believe in therapy for the sake of therapy," says Nick Flavin. "We want things to happen which are excellent in their own right. We hope we will have one place in Edinburgh where people can go and mutually enjoy things like playing snooker together, regardless of whether one is mentally handicapped and one is a university professor."

The centre has a community artist in residence who is to undertake a mural scheme with young unemployed, there is a community drama group and a number of women's groups, in particular for those who have suffered mental breakdown, or who have lost confi-

dence following mental illness. As well as university backing, the settlement receives funding from Lothian Health Board, Lothian region's departments of education and social work, and Edinburgh Students' Charities Appeal.

Some of the settlement's schemes are, however, still struggling for funds. One is Pathway, a centre for young single homeless women, for example victims of incest, which was launched on the assurance of a Scottish Office grant now axed by government cuts.

Another scheme temporarily abandoned brought overseas students to Edinburgh to study the settlement and promote the idea in their own country that universities should be more closely involved with alleviating social problems.

However, the settlement's work went beyond Edinburgh this spring when it launched a Scottish folk album to help the Ethiopian famine victims. The album, *Freedom Come All Ye*, includes a ceilidh rendition of the title track, written by the folksinger and poet Dr Hamish Henderson of the university's school of Scottish studies.

"Although settlements are locally based, when you're looking at development work, it's a world problem," says Gló Harris. "You can't afford to look at anything in isolation."

Karen Gold talks to folk singer and Sheffield Poly head of department Roy Bailey

Songs on a social theme

Leading a double life is a difficult business. People treat Roy Bailey, dean and head of social science at Sheffield City Polytechnic, as though he may have a guitar and long-haired audience concealed behind his back.

The suspicion reaches even the Home Office: at the last allocation of probation officer training places among the polys, one committee stalwart turned to another and asked: "Sheffield. . . ? Is the folk singer still head of department there?"

For Roy Bailey, academic author, conference speaker, multi-external examiner, department paper-pusher, also has a 25-year folk-singing career spanning two continents, numerous records and a dedicated following that includes Chesterfield MP Tony Benn.

Bailey was born in the East End of London, but his family moved to the more socially aspiring suburb of Wford when he was small. He played the piano and sang by ear the latest popular songs; he would be summoned to the front room to demonstrate this talent to guests.

After national service he became a sales rep for the National Cash Register Company, based in Southampton, winning a young salesman award and playing skiffle piano for the Southampton University students' union. He had thought about going to university; contact with students reawakened his interest and in 1964, aged 24, he went to Leicester to do a BA in social science.

He did his degree, then a teaching certificate. Meanwhile he had moved from popular songs to traditional English folk music, not from political affiliation - though he had already been on CND Aldermaston marches and was later to play a sideline part in protests at the London School of Economics and Paris in 1968 - nor strong musical taste, but simply because it was the thing to do.

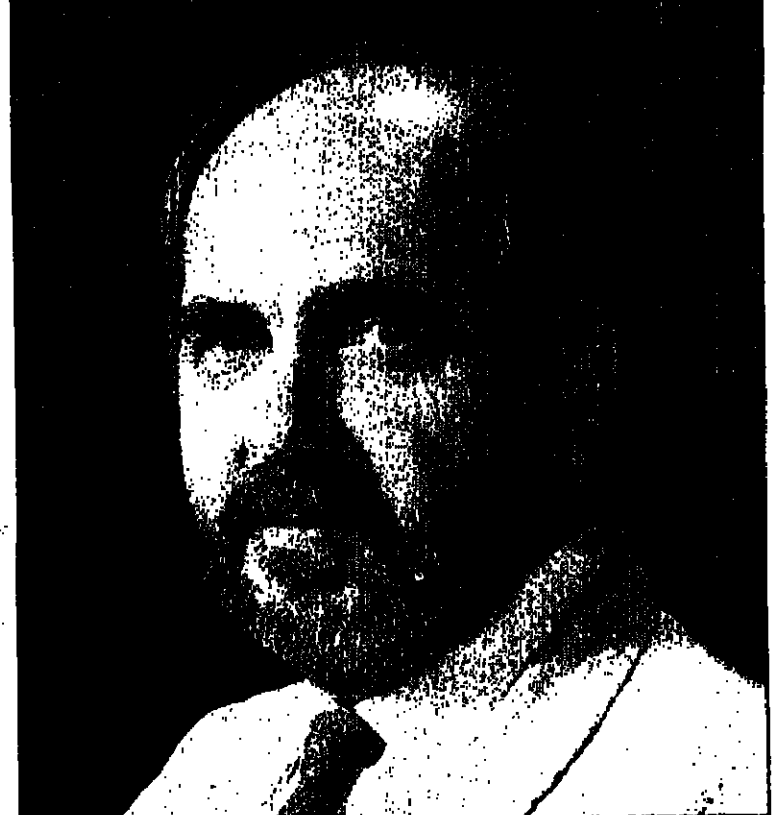
Every one he knew was becoming a

folk singer. He met, sang with and married his wife Val. He had more invitations to folk clubs and festivals than he could answer. But he was also becoming an evangelist for social science, he says, so in 1964 he became lecturer in sociology at Enfield College of Technology, now part of Middlesex Polytechnic.

He helped create the sociology course, recruited some of the people who would be influential voices in subsequent years - Jack Young, Stan Cohen - and moved from lecturer II to principal lecturer in two years. Enfield was the place for rising stars: his colleagues there included at least three current polytechnic directors including John Stoddart, his director at Sheffield. "People who were with me at Enfield are now telling me what to do," he says.

In 1967 he moved to Bradford University as lecturer in sociology, and in 1971 to Sheffield as head of department. The singing invitations still came in but he turned most of them down. Instead, with Young, Cohen and Laurie Taylor at York University, he was setting up the National Deviancy Conference - the national public forum for questions of crime and punishment - and then working on a book, *Radical Social Work*, which was substantially to change the face of the subject.

Again, he says with a kind of energetic fatalism, it was not so much inspiration as being in the right place



Roy Bailey: "Music is a relief".

at the right time. He was teaching sociology to social work students who were locked in psychoanalytic theory; if the students even criticized their tutors they were considered to have a problem with authority.

Radical Social Work, which was published in Britain in 1975 and the following year in America, and which was virtually a best-seller, was the first of a whole library of books now in print of whole social work and social workers' clients as subject to economic, social and political pressures and not just individual "problems".

"It was luck," says Bailey. "What came from questioning social work students and tutors turned out not to be peculiar to Bradford but was the future of social work education. Before, people didn't have the basis for criticism."

"I don't think it changed social work practice. Now I'm surprised, because the things we said were just commonplace. To write it now would be almost like writing a *Reactionary Social Work*: everyone's a radical social worker now."

Two further books followed but so,

having settled into Sheffield, did more music. By now he had a repertoire of radical English songs, both old - going back to the diggers and levellers - and new: his latest album, out this summer, includes a song about the Falklands war. He sang at festivals and during vacations; he performed in Europe, Canada and the US.

His singing was constantly rediscovered and enthused upon by the music press - "a flawless voice . . . an exceptional singer" - who would ask why Roy Bailey was so infrequent a performer. Tony Benn became a fan when they met at a Workers' Educational Association meeting about the levellers and again at miners' benefit concerts: he has written the sleeve notes for Bailey's new record.

Sheffield Poly encouraged the double life: its former principal Dr George Tolley (now head of quality at the Manpower Services Commission) was also a part-time Methodist minister and would say as he met Bailey in the corridor: "I've got a gig tonight, when's yours?" In Canada particularly his music and academic work are seen as complementary: he has been invited to present lecture programmes of songs and talks on labour history and issues.

But in cut and squeezed British higher education, anything less than obsession is treated as dilettantism, he argues. "The idea in this country is that if you do two things, you aren't really serious about either of them. Music is a relief: I can think I lost that argument at academic board, but I can go off to Birmingham and do a couple of concerts."

"But if I want to move into the directorate of institutions, because I think that's where I could make a contribution, the tag 'singer' means some people won't take me seriously. At the same time, I'm not going to say I will give it up. It would be wonderful to be director of a polytechnic and do a gig in the local pub."

Harold Silver

Siting conflict, mis-spellings and other howlers

Outwith certain conventions it is on the agenda that people need to be given space. There are, of course, jagons that surge in and around all academic fields, or spread surreptitiously throughout the community. Why outwith his suddenly struck with pernicious violence I do not know. I had thought we were, in England at least, happily outside or apart from. On the agenda is probably a useful piece of conversational bureaucracy, but it becomes tiresome over a glass of beer to watch our respective agendas, put things on our agenda, reserve them for a future agenda, and feel that the pub is becoming a permanent committee room.

Space is becoming the worst, and one of my main allergies for the year. Like site it is a piece of radical passion in origin. In the literature of radical commitment in recent years the school or anywhere has become a site of (always of) conflict (always conflict). But so far site has not spread into the commonplace. Space runs the risk of doing so.

My most recent encounter with the plague was in one text which talked about giving people space, allowing space, course providing space, the importance that space be available, and space having to be created in order to look at. . . In all cases the reference was to what cruder terms we called time or opportunity. Space is in all of these cases a euphemism. It assumes a hostile structure within which an alternative has to be carved out, and is in that sense understandable and even tempting in derivation, but is becoming as vacuous a lingo as *super* or any other earlier fashionable way of saying little or nothing.

That, and what follows, no doubt reveals the kind of space for reading, outwith other commitments, that is on my personal agenda at this time of year.

Some authors, unfortunately, write more than one book, and produce papers at regular intervals. Unfortunately and regrettably, because researchers and others who use their work then have to romp about footnotes, references, bibliographies, amidst mountains of *op cit*, which thoroughly mystify the would-be devoted scholar hot in audacious pursuit of the origins of truth. Bad enough when the pursuit is of one book or article, but in the presence of the prolific. . .

Some styles of referencing evade the problem but propel scholarship into different rapids. I once wrote (and no one published) a proof on the learned work of a colleague, in which his work is cited, à la Harvard system, as . . . 1966a, 1966b, 1967a, 1967b, 1967c. . . and so on more or less exponentially. I had forgotten how relentless that was until I was reading a contribution by Zelig to a history of the American Head Start project, in which he refers at one point to several of his papers, as (Zigler, 1970, 1973, 1975). Just forgivable. *Op cit* just isn't.

The thought, following the headache of reading a long thesis, is that *op cit* should be banned, totally, everywhere, for ever. It is not a first thought, as I have long given up trying to trace back an *op cit* to its original reference in the text. Why, on page 247, I should have to leaf back to page 113 or 56 or 4, or even with luck 246, to find what Jones *op cit* might possibly refer to I cannot conceive. Subscriptions invited for OAS (Op Cit Abolition Society).

And while on the campaign trail, let me go for another ban. Let us and the submission of bound copies of dissertations and theses for examination. Every institution of higher education, every supervisor, every examiner is

patiently grappling with problems of minor amendments - and not so minor amendments. A balance has to be struck between being pernickety and right, and being a nuisance and causing expense on the other hand. . .

Why we cannot adopt the widespread American practice of having work submitted in temporary binding I cannot imagine. If there is a bibliography to be redone, unpleasing typing errors to be corrected, a chapter to be added, acknowledgements to be made, page numbers to be amended. . . it really ought to be possible to simply the thesis, make the amendments and resubmit. I offer the following draft regulation: "Candidates being judged to have satisfactorily completed the requirements by the examiners will be awarded the degree on the presentation of their thesis in the prescribed binding". Tenders invited for cheap, temporary, self-administered bindings. Members needed for FAF (freedom and flexibility) for students and examiners.

And the perennial, unwinnable battle against errors uncorrected by student, author, typist, proof reader, or whomever. I have just read two of the unendingly interesting reports from the Stanford Institute for Research on Educational Finance and Governance. No one has more important things to say about evaluation than Milfrey McLaughlin, but I was puzzled by her reference to the "concepts of your" until, on further reading, I found it to be a mistake for "concepts of use". John Chubb's study of federal aid to education talks of Reagan's policies leaving certain programmes "in tact". Great fun.

And when I house-sat for my daughter's state shared a common despair about the state of one of our national institutions by leaving a note to suggest the boiler could be lit with any oil on the *Graumaid*. A friend, no less, let me see the final stage of his thesis, and one of his main sources is mis-spelled throughout. My own students conduct a sit-in, and put up a large notice - immediately, of course, given the full treatment by the local press and popular OCCUPATION.

The educational press has regular hysteria over school examination howlers. I have, from more distant teaching days, favourites. The apprentice who described the machine into which, at Blackpool, he inserted his pennies - phallically mis-spelled. And the clever devil, who interestingly, thought, really thought, it was technology.

It is, of course, not essential to civilization that students and colleagues should know about it before a copy after c, or that when the stress is on the last syllable you double the r or t or l (and simply try not to use unparelleled). It is not life or death not to miss the shape of Pestalozzi or Pestalozzi or whatever. (Or, as in something else I have just read, the difference between 1859 and 1895).

But somewhere in the mechanisms of the study or the college or university, in the way in which we process dissertations and theses and articles and occasional papers, there ought to be a filter. One which works. Why should I, before going off to conduct a viva, have to list pages of errors for correction, simply because our institutions are too lazy to establish mechanisms to ensure that they are corrected beforehand. Let us demote authors who fail to proof-read properly (when given the chance). Let us close graduate programmes which make examiners do the grubby work.

This has been a good summer for creating space to put some indoor allergies on the agenda.

The National Advisory Body is adopting the wrong approach to the management and organization of the public sector of higher education in England. There are four specific failures in its portfolio of policies. First, it has no institutional policy. The National Advisory Body continues to work on the basis of the myth that all institutions are equal and have comparable roles. Second, it has devised a highly centralized method of control that specifies student numbers in great detail in a manner that actively discourages initiative. Third, the National Advisory Body has increasingly adopted the ethos and values of the universities rather than establishing a distinctive rationale for the public sector. Fourth, the funding system is determined by pragmatism rather than educational policy and is in danger of discouraging excellence.

These four major problems of the National Advisory Body have failed to resolve are balanced by some successes. The subject studies, particularly when considered on a transitory basis, are a sensible and necessary feature of planning higher education. The National Advisory Body has provided a voice for the public sector system. From time to time that voice may be saying the wrong thing but its influence on government is significant and it is essential that it is retained at an effective and influential level.

The largest single black hole in the policy of the National Advisory Body is its complete failure to recognize the different educational roles of different types of institution. The present system classifies colleges into four groups: the polytechnics, the major colleges, the voluntary colleges, and the minor colleges (or "residuals" as they are disparagingly known).

The 29 polytechnics are a well defined group representing over 60 per cent of the system. In contrast, the large colleges are classified as a result of an incredible formula which balances the size of the college against its proportion of advanced work. The 41 colleges in this group only have their differences in common. The group includes: colleges of art and design; institutes of higher education; specialist colleges; further education colleges with some advanced work.

The number of advanced students enrolled ranges from 200 in the smallest college, to over 4,000 in the largest. There is no educational rationale whatsoever for this group and there is no policy which leads to its definition other than the fact that the colleges are neither polytechnics nor small pockets of further education.

For example, the impact of changes in the formula for allocating the pool will be different for an institute of higher education that is almost totally reliant on the pool than for a further education college with a minority of pooled work. Furthermore, it is itself a mistake that the planning of a monotechnic art and design college should be determined by the outcome of the study of the provision of art and design courses rather than by affecting this category of large colleges.

The second failure in policy is the highly detailed and centralized control that has been established over student numbers. The National Advisory Body now specifies for each college a matrix of student numbers. Students are categorized into 19 subject areas and figures are laid down for both first year and total numbers on courses. In addition, there are maximum numbers for full-time and sandwich study and for degree and postgraduate work.

The system evolved out of a need to calculate the money allocated to each college. The money is based on the total student numbers and to an extent it is legitimate to indicate the assumptions behind the grant allocation. This only requires total numbers. Comparatively late in the day it was realized that in order to influence the shape of the system it was desirable to specify the first year numbers so that recruitment could be either encouraged or discouraged.

The complexity of this approach might, by a generous stretch of the imagination, be justified for the polytechnics. It is an irrelevance to many of the institutes of higher education, and the colleges which are primarily involved in non-advanced work but with a small amount of pooled work. Yet all are subjected to the same blanket approach and the same crude assumptions.

Effective planning of the system must recognize that it is necessary for discretion to be encouraged at local level and that detailed centralized planning at national level is counterproductive. This centralized control is,



All for one and one for all

In the final part of his series on the National Advisory Body, Peter Knight questions the division of the public sector into four competing groups

to a certain extent, a consequence of the failure of the National Advisory Body to determine a clear institutional policy. Such a policy could have recognized that, the further education colleges with a small proportion of advanced work are, almost without exception serving a local need, not a national one. Therefore, the decisions on the courses to be offered, the finance available, and the students enrolled should be taken locally. It is insulting to the local nature of the work to suggest that it should be planned on a national basis from London.

The third criticism of the policy of the National Advisory Body is harder to substantiate. The difficulty is not that the criticism is invalid but that it is about ethos, belief, identity and style. The National Advisory Body is in danger of adopting the value judgements of the university system rather than establishing a clear identity and policy priorities for the public sector.

The universities place a high priority on research and scholarship for its own sake. Universities are both research and teaching institutions. The quality of a university department is usually judged on the quality of its research rather than the quality of its teaching. The assumption, universally accepted, but always unproven, is that quality in research will have a positive effect on the quality of teaching. A particular manifestation of this belief is the priority that the University Grants Committee has placed on defending the "unit of resource".

These value judgements of the university sector have affected the National Advisory Body in two significant ways. First its establishment of a research policy and second its defence of the unit of resource. Even now it is not clear why the National Advisory Body rushed out and established a research policy and a research fund. Interest groups were lobbying for other developments. The research group concept came forward with the concept that research in higher education institutions fulfilled two objectives. First, there was the level of degree and postgraduate level. Second there was research and scholarship for its own sake that advanced human knowledge.

After considering this the National Advisory Body decided in the 1985/86 financial year to provide special funding to assist primarily the second development. For the same sum of money it would have been possible to provide more students with places, or to provide encouragement for specific initiatives in part-time and continuing education. Instead the National Advisory Body gave a clear signal to the

system that it placed a high priority on academic research and scholarship. A far more rational approach to research would have been to regard it as a problem for institutions to manage their resources in order to ensure that they provide sufficient support for research to maintain the quality of teaching. In this way a research policy and research funding would have been seen as a matter for institutional management in the same way as the funding of the library, the computer centre, or any other aspect of the college's work.

The National Advisory Body has also adopted the concept propagated by the University Grants Committee that there is a unit of resource below which the system cannot go. While this is a legitimate bargaining stance to be taken with the Secretary of State it is nonsense in the public sector because one is not dealing with comparable colleges doing similar types of work. There is a vast range of work which can operate over a wide range of funding. If the ethos of the public sector is about anything then its principal policy must be access rather than the unit of resource.

This problem of ethos and beliefs is difficult to grasp. On many occasions, admittedly on small issues, the value judgements of the universities tend to take precedence. The National Advisory Body could have made an enormous contribution by establishing, and then standing by, clear values for the public sector. It has singularly failed to be effective in this respect and by some of its actions it has shown itself more supportive of the university system than the public sector.

The final failure of the National Body is its funding strategy. The system has now "locked up" because there is insufficient money to move from the status quo and there is a lack of policy objectives which could encourage change. The detailed specification of numbers on a college basis provides no incentive for any institution to recruit over its target numbers.

The National Advisory Body could have devised a system which would have allowed an institution to recruit additional students on a sliding scale of marginal costs. An institutional policy would have been necessary. It could well have been sound to let some institutions have this freedom while controlling others on a different basis. On this occasion the blame cannot be laid at the door of the Department of Education and Science and the Secretary of State. The failures are the responsibility of the National Advisory Body and it is that organization that needs a new sense of purpose. It must recognize that colleges fulfil different educational functions.

Above all, the National Advisory Body must establish a sense of identity and purpose for the public sector. It will fail to make progress as long as it maintains its present enthusiasm for research, scholarship and "units of resource".

Dr Peter Knight is director of the City of Birmingham Polytechnic and a past member of the board of the National Advisory Body.

Tinker, tailor, bleeder, grieve

Penelope Corfield on the division of labour in the 18th-century

The expanding towns of early industrial Britain spawned an immense range of specialist jobs - in manufacturing, in commerce, in the professions, in services. So notable was the process that Adam Smith argued that it formed the essential framework for economic and technological innovation.

Thinking itself, in this age of separations, may become a peculiar craft," suggested one Scottish professor in 1767, heralding the arrival of the intelligentsia. Adam Smith argued, in *The Wealth of Nations* (1776), that: "In the progress of society, philosophy or speculation becomes, like every other employment, the principal or sole trade and occupation of a particular class of citizens. Like every other employment, too, it is subdivided into a great number of different branches, each of which affords occupation to a peculiar tribe or class of philosophers; and this subdivision of employment in philosophy, as well as in every other business, improves dexterity, and saves time."

Very little is known, however, about the array of jobs that were actually carried out in later 18th-century Britain, although it may be guessed that only a few made a living from pure "thinking". Before the first full census of occupations in 1841, no national survey was undertaken with any detail. The process of job creation and the last-increasing subdivision of labour took place without official record, although these changes did not go unnoticed.

Historians, who wish to recreate this lost economy, have therefore to make what they can of the scraps and incomplete sources that have survived. The early town directories from the 1770s and 1780s, for example, which listed names, addresses, and occupations of the leading local citizenry. Not intended as a census, their role was none the less to provide information about job specialisms for at least one section of the populace.

In a study of approximately 30,000 listed individuals (in 16 early directories for leading British cities in the 1770s and 1780s) a total of 1,964 separate job designations were itemized. On average, that constituted one specialist occupation for every 15 individuals or firms listed. It was not a large total compared with the thousands of jobs that were counted by the census of 1841. Yet, in comparison with earlier periods, it was high. Partial listings of tradesmen in later 17th-century towns, for example, rarely indicated more than 200 or 300 separate occupations. A detailed account of all the trades, crafts, and professions in London published in 1747 had specified no more than 367. That suggests that the multiplication of specialisms, from hundreds to thousands, was particularly marked in the latter 18th century.

Adam Smith had predicted, one means of earning a living, in a progressive society, was that of "lecturer in philosophy". Few, however, followed that specialist pursuit. By far the most common single occupation was that of "merchant", accounting for just over 8 per cent of all entries in these directories. Women, who were recorded relatively rarely in these sources, were noted most frequently as inn and ale-house keepers, followed closely by their new take-over of the trade of "milliner".

Some specialisms were recondit. The population of Edinburgh in 1773, for example, had the services of an artificial tooth-maker. In Dublin in 1774, budding authors were accommodated with the wares of a black-lead writing-pencil maker. In Birmingham in 1781, there were manufacturers of buckles, bayonets, pocket-locks, corkscrews, chaffin-dishes, coffin furniture, buttons. Another galaxy of specialist metalware workers were to be found in Sheffield: not least among them, the cock-weapon maker (Mr Sleight of Pond Lane), who deeded metal spurs for fighting cocks.

Not was subdivision confined to manufacturing occupations. Many merchants and wholesale traders listed their specialist interests. There were dealers in oil-stoves, mill and grinding stones, as well as others dealing in pearl ash, or blisters and faggot steel, Newcastle glass, and many varieties of spirits. Merchants were highly diverse-

fied. Some traded in coppers, others in diamonds, Flanders thread, indigo, marble, oranges, ostrich feathers, rabbit fur, whalebone and wines. There were large specialist warehouses for wholesale trading. Many were located in London, including warehouses for children's linen, hooped petticoats, lace, handkerchiefs, burial craps and hunting umbrellas, Turkish rugs, Kidderminster carpets, Wedgwood pottery, bone china, hair, turpentine, mineral and distilled water, vinegar, iron hoops, and fire-buckets. For those in need of further solace, one house traded exclusively in Stoughton's Elixir, a laudanum-based cordial.

Detailed patterns of domestic and international trade were also signalled by this occupational information. The location of traders in regional products indicated the expansion of market networks. There was a specialist "cellar for London porter" in Glasgow in 1784. Meanwhile, there was a warehouse for "Scotch lawn" in the metropolis, and many cities had a local "Scots merchant" or "Scots factor" for the linen trade.

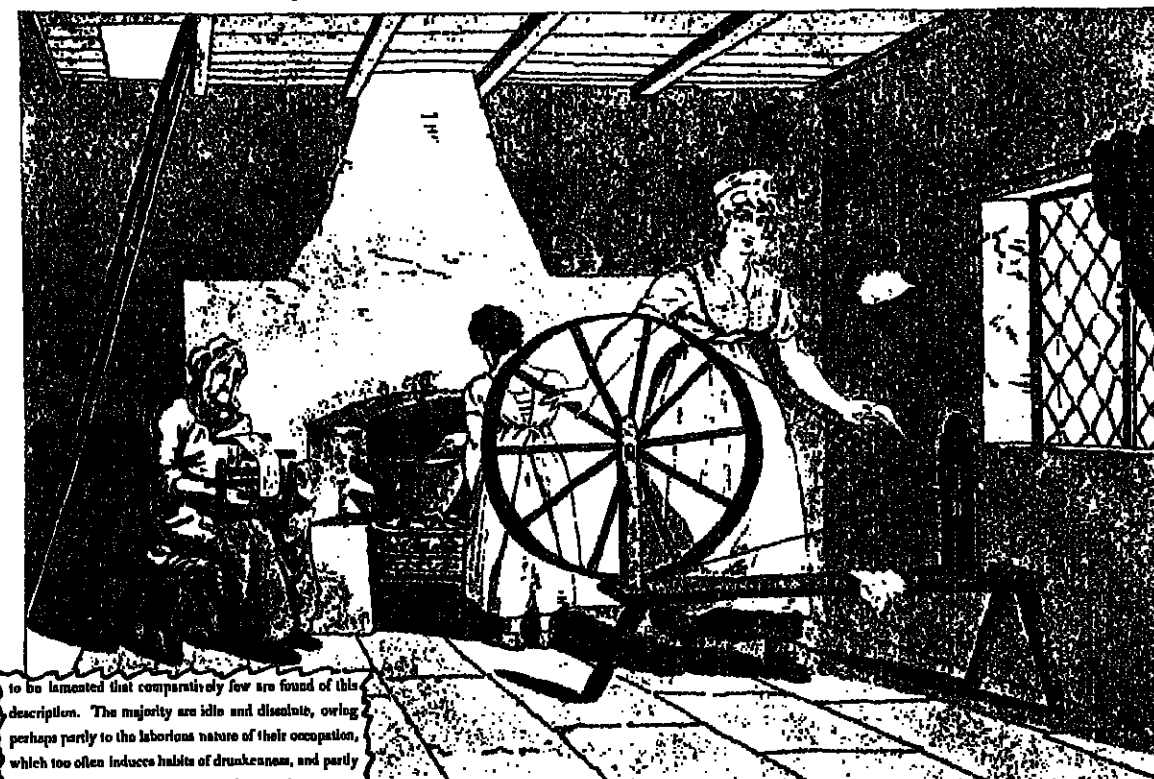
The rich diversity of a powerful commercial and industrializing economy was everywhere apparent. Directories were detailed and informative about local shops and occupations. Services in all urban economies were underpinned by the infrastructure of supply: food, clothing, housing, heating, industrial raw materials, furniture and furnishings. They also depended upon, and generated in turn, a wide array of industries and service occupations, not least the burgeoning transport network. As the economy became more specialized, so individual workers depended more and more upon a highly organized and complex system of interlocking specialisms.

Professional and educational services were among those prominently on offer in an urban location. The directories are variable in their record of this sector of the economy, partly because separate handbooks for the professions were providing alternative lists. The towns certainly housed many clergy, lawyers, doctors, as well as sundry teachers, divers, and lecturers. Among the specialist facilities that were advertised in these sources were those of a professor of stenography in Dublin, a professor of Hebrew in Edinburgh, a professor of languages in Bristol. The 18th-century consumer-led expansion in education facilities prompted the founding of many schools, the grander ones (such as the Mercantile Academy for the youth of Dublin) being listed in the directories. Many individual teachers were recorded, with skills, diversities, in the major European languages, classics, music, dancing, riding, pastycooking, mathematics, drawing, writing, natural history, accounts and book-keeping.

Some of the job designations were as specific as the occupations they described. In the ports, the "tide waiters" literally attended upon the incoming tides, in order to inspect and assess ships' cargoes for the customs office. That was one of the lowliest of positions in the government service. A century later, when Trollope wished to indicate a nadir in the volatile career of Phineas Finn, his hero mused "that any government should now employ him, even as a tide waiter, is quite out of the question". In fact, the directories are good sources for the complex variety of placings in the customs office (less good for other branches of central and local government employment). Other maritime attendants therefore included the "coast waiters" and "land waiters", as well as soothingly-enlited "tide surveyors".

Other terminology was as graphic. The "number-seller" sold books and pamphlets in separate "numbers", as they were published hot from the press. The specialist "chimney-doctor" and, elsewhere, the "operator for ears" had signally decided to concentrate their attentions. Similarly, the "author of the history of Manchester" had no doubts about his métier in life. Meanwhile, the melodiously-named "bleeder" of Bristol (1775) used no circumlocution to describe his particular skills.

There were some notable variations in regional nomenclature, although in



to be measured that comparatively few are found of this description. The majority are idle and dissolute, owing perhaps partly to the laborious nature of their occupation, which too often induces habits of drunkenness, and partly to their working in numbers together, a circumstance always injurious to morals. To the steady conduct of the Crompton, which by its times of urgent business much less and inconveniences were suffered by its employees, and from the great improvement lately made in machinery, may be attributed the invention of the gig mill and shearing frames. This machinery effects with certainty and dispatch almost every operation of cloth-dressing, with very trifling manual assistance. The establishment of these mills excited considerable alarm amongst the Cromptons, and was the alleged cause of the late unhappy disturbances. By the active vigilance of the magistrates, the prompt execution of some of the regulations, and the well-timed reply given to others,

general the vocabulary of occupations was becoming nationally standardized. For example, in Bristol, there were two mysteriously-entitled women, who were "grutt-makers", a term unknown to the *Oxford English Dictionary* and to its 18th-century precursors. The nature of this occupation is still under investigation, but it may be a West Country variant for out-(grout)-meal maker. Unsurprisingly, a number of divergencies were to be found between English and Scottish terms. Only north of the border were "baxters" (bakers), "feshers" (butchers) and "grievs" (baillifs) included in the listings. There, too, "room setters" were those who rented out rooms for lodgings; and, by analogy, the rare "horse setters" (also unknown in OED) kept horses for hire.

As handbooks essentially for the business and commercial world, directories did not contain much information about "high society". The fashionable began to compile its own specialist reference and guidebooks in a rather different publishing tradition. None the less, the directories did list a number of titled individuals, nestling amidst the merchants, dealers, manufacturers and service workers. One duke was humbly noted among the tally of squiremen in the City of Winchester in 1784.

The directories are also interesting on the social peregrination of the title of "gentleman". Individuals so nominated were of some status, for the public use of the term was not common. Yet the days when "dilettens" constituted its major qualification were gone. There was a gentleman tanner in Birmingham, for example, and a gentleman potter in London, both listed without additional comment. Similarly, the manager of the theatre at Norwich, and the master of ceremonies at Bath both claimed the status, as did a professor of divinity at Edinburgh.

"Low life" was not much in evidence in these formal publications, although there were many satirical and half-admiring guidebooks to its more notorious elements. The routine but unglamorous urban services, such as those of scavengers, crossing-sweepers, lamp-lighters, road-makers, let alone those of washer-women and household servants, were not included. These occupations had their own sources of information, but not usually in print. It is likely, however, that many sorts of urban occupations in this period were affected by the process of specialization. Adam Smith's famous example

of the division of labour was taken from the "very trifling manufacture" of pins. The directories are also suggestive of specialization in all sectors of these urban economies. Notable among many particularities was the "horse milliner", presumably vending ribbons and hats - especially for an equine custom.

As far as female employments were concerned, the directories gave partial but important testimony. Among the 30,000 entries, only a small proportion (7.8 per cent) were women, although they may also have been concealed in the further numbers (9.5 per cent) who were identified solely by initials. They were excluded not by specific policy, but as not constituting part of the business "leadership" in the urban community. Indeed, given the theoretical subordination of the "second sex", that are more significant. Inevitably, one directory compiler was herself a woman, but Elizabeth Raffald did not list her own name in her 1772 guide to "every Inhabitant of the last Consequence" in Manchester.

Specialization was apparent here too. Women listed in the directories were in fact engaged in a wide variety of employments, but they tended to concentrate, in terms of numbers, into shopkeeping (especially millinery), shoekeeping, and lodgings-keeping. These were occupations that, conceptually at least, extended rather than challenged the notion of female destiny as handmaidens and housewives, although no doubt many individuals differed freely from these stereotypes.

Yet many others were engaged in industrial employments. There were women listed as metal-manufacturers in Birmingham and Sheffield; as sword-cutters in Dublin, and also as stampers, wire-workers, and brass-makers there. Many others were engaged in the manufacture of items of clothing and furnishings, these occupations being found in virtually all urban centres. Of course, there is no way of knowing whether individuals listed in these sources were owners, as opposed to shop-floor workers, at their specified trades. Some women were owners, who had inherited businesses from their husbands, and may not have participated directly in production processes. Of the nine female scissors-makers in Sheffield in 1787, for example, five had been widowed and two others were trading with their sons. Yet all had a public identification with the business, implying at least some level of involvement - not least the ownership of a specialist and much-coveted cutter's trademark, such as the two women scissors-manufacturers, Mary Redfern of Sims Croft and Ann Drabble of Attercliff.

Their range of occupations, furthermore, suggest that not all can have been inherited. Women were found as teachers, keepers of circulating libraries, booksellers, nurses, dentists, and midwives. Others followed commercial avocations, such as brokering and dealing. Some were engaged in out-of-doors employments, such as gardeners, bricklayers, and cow-keepers. And a few were involved in very distinctive pursuits. There was a female trader in ship's ballast at Bristol, or her fellow-citizen there, who was a sexton. Liverpool, meanwhile, had a woman pilot, Newcastle a woman hackney-horse keeper, Edinburgh a woman auctioneer of house furniture, and Dublin a woman undertaker of funerals.

Indeed, there was some tension here between rival bases for specialization. While the sexual division of labour in the market place often resulted in women being concentrated into shop- and innkeeping occupations, there was another pull from demand for specialized skills in local economic context.

That meant that, while a preponderance of directory women worked in commercial and dealing activities (55.3 per cent), there was also a sizeable number who worked at various manufacturing trades (35.3 per cent). The local variations are visible in the detailed breakdown of figures for individual towns. There were, for example, more women "manufacturers" than there were women "dealers" in the metalware centres of Birmingham and Sheffield, as there were too in the textile city of Norwich. In the ports and dockyard towns, the balance was quite the other way. There, sea-going and shipbuilding were male specialisms, and women in the local workforce were concentrated into dealing and support services, including inn and lodgings housekeeping, and semi-lit enterprises of the red light districts.

Certainly, sexual stereotyping had not disappeared within the industrial areas. For, above all, the extent of occupational streamlining in the early industrial revolution was striking. Changes were apparent in commercial, industrial, services alike. And they clearly preceded the emergence and eventual adoption of the modern factory system. Technological and organizational innovation sprang from a skilled and specializing workforce. In other words, economic development drew from the creative interlocking of many diverse goods and services. Present-day politicians, wishing to recreate its context, should cultivate philosophers as well as pin-makers.

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Forty years ago Winston Churchill told the King that he expected to win the general election with a majority of between 30 and 40 seats - the *Daily Express* forecast a majority of 60 for Churchill. By lunchtime on the second day of counting it was clear that a Labour government had been elected with a very big majority. It was a government much interested in planning but not much interested in the arts although the new Chancellor of the Exchequer's wife subsequently sat on the Arts Council.

Because of the need to collect the service vote there had been a three-week gap between polling day and the count, and during that gap Keynes gave his much-quoted BBC talk on "The Arts Council: its policy and hopes". Keynes had already secured the future of the Arts Council as a permanent body and his talk was, as much as anything, a celebration of the arrival of the Arts Council.

After his death, in April 1946, Keynes' talk was printed in the Arts Council's first annual report and it is interesting that though in the talk he didn't use the word "planning" once, Mary Glasgow, the council's secretary-general, summarizing Keynes' talk said "He spoke of art as something incalculable, not to be confined or measured by planning, but cherished and made available for all who wanted it."

That summary is about two thirds accurate. Keynes had said nothing about planning. But Mary Glasgow's sentence is, I think, very revealing. First, because planning is seen as negative, a confining factor when it comes to the arts; planning is contrasted with cherishing the arts and making them available to all. Second, measurement is treated with suspicion - the arts are something incalculable.

These who saw the National Theatre production of *The Mysteries* might have learned from the programme that, in Middle English, the word "mystery" meant, quite simply *craft*; and that was long before any distinction was drawn between the useful and the fine arts. The arts are something incalculable, but as Denis Donoghue argued in his Reith lectures three years ago, there are powerful tendencies in society that would rob them of their incalculability, and that our "flavour of the month" society insight is more important than novelty.

To protest against the bias towards reductionism and quantification, to protest against the progressive mechanization of life, as every sensitive person must, is not necessarily to turn one's back on the techniques and disciplines of planning. Mary Glasgow was wrong to identify planning with measuring and confining but in that first annual report she had a point. In one sense at least the arts cannot be planned for: the one thing that is almost certain about creative people is that they'll come from the direction in which you're not looking.

In its weakest sense, planning is the making of arrangements for the future and it occurs in all activities of government. The Policy Studies Institute started life more than 50 years ago as an organization called Political and Economic Planning and one of its first concerns in the early 1930s was to develop a National Plan. A great deal of work went into that attempt and it is clear from that experience and from George Brown's *National Plan* of 1965 that, on the macro-level, planning involves working on three quite distinct planes of thought, attitude and action.

First - and in this planners are on good ground - there is the need to supersede piecemeal treatment of the various aspects of public policy by coordinated treatment, and action based on rule-of-thumb and hunch, by fact-based and research-based programmes. That argument is now widely conceded though it isn't always, especially in the arts.

The second level involves the whole question of forecasting - and it is in this area that many planners (particularly economic planners - and, notoriously, forecasters of energy costs and requirements) are now sadder and wiser men. Even with the help of greatly improved computer and other aids, the record of social and economic forecasting has tended to undermine those committed to comprehensive, medium-range planning in public affairs.

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Landscaping the garden



Robert Hutchison gives new arts minister Richard Luce (left) some hints on arts planning as laid down by Keynes (right)



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planning is about the allocation of scarce resources.

The suspicion of, if not actual hostility to, planning that has been a dominant feature of the Arts Council for most of its history can mainly be attributed to a wholly healthy suspicion of central direction of artistic life and a fundamental belief in the policy of response. *The Glory of the Garden* marked a new departure as the first thorough and fundamental review by the Arts Council of its work. Whatever its strengths and limitations, *The Glory of the Garden* is a planning document, but one produced in a very constraining political environment.

The truth is that compared to the 1960s and 1970s, we live in an anti-planning climate. The last six years have seen the demise of strategic planning in Britain. The Regional Economic Planning Councils were the first to go in the somewhat restrained quango cult of 1979. The six volumes of the 1980 Strategic Plan for the South-east were effectively replaced in August 1980 by a Government statement on two and a half sides of A4. And now we see the disappearance of the GLC and the metropolitan counties which were specifically set up as a strategic planning authorities. In interesting itself in planning at this time the Council of Regional Arts Associations can hardly be accused of following fashions. We need planning not least when faced by the nightmare of abolition.

Planning calls for vision and clear goals. Where there is no vision the people perish and the inspirational somewhat neglected founding fathers of modern town and city planning - Lewis Mumford, Patrick Geddes, Ebenezer Howard - saw that the unique gift of the successful planner was to see things whole, to see their interrelations; planning is concerned with the forms of things as yet unseen and thus should be in itself a highly creative process.

Widely, much of the current focus in the regional arts associations will be on planning at county, district and project or organizational level. At those levels, as well as at the regional and national level, planning is about generating and assessing choices, securing agreement on action and helping to provide facilities and opportunities. In general, and this applies to the Arts Council, the Crafts Council, the British Film Institute, regional arts councils and local authorities that task fits most uneasily with the responsibilities of direct promotion. Indeed there is often a direct conflict of interest. The Arts Council showed commendable self-denial in shedding most of its direct promotional work in the decade after the war, but it didn't go far enough. There should be a decent division of labour between poachers and gamekeepers, at every level of activity. More of us should belong to that select club that on moral grounds employs other people to redecorate the living room.

So there should be no lasting place for much DIY or direct promotion in the work of Arts Councils and regional arts councils. At the same time the municipal intelligence, was always something of a contradiction in terms and local authorities might be able to release a lot of resources for more creative purposes if they weren't consigning millions of pounds to the subsidy of what often fairly ghastly leisure or entertainment complexes. The county arts plans that are spreading like measles through East Anglia are a welcome innovation. But more local authorities need persuading of the merits of the arm's length principle at local level.

Shedding the hazards and responsibilities of direct promotion allow us to sidestep bodies and local authorities to plan their priorities with much clearer heads. Regional arts associations, for example, must continue to bribe, ca-

jole and advise local authorities; the job of an RAA officer involves being a catalyst, midwife, marriage broker and initiator - and something of a planner too.

But if it is right to accept that the main job of arts quangos and regional arts associations is to give grants and guarantees and to rigorously assess the quality of planning in the subsidized arts. What then has to be identified is the right mix of a planned approach and a policy of response - a sensitive response to artists' needs must be a prime consideration. But the distinction between who counts as an artist and who doesn't will always be somewhat arbitrary. There is an enormous amount to be proud of, to celebrate and enjoy in the achievements of British artists and subsidized companies. At the same time, large sections of the population have been sold short by those responsible for decisions about arts subsidy.

The common thread that needs to run through arts policy at every level is the need to invest in skills, the need to invest in people in an unprecedented and systematic way. This can best be done at a local level. In the mid-1970s the government funded experiments in *Leisure and the Quality of Life* in four areas of the UK. Hundreds of thousands of pounds of public money was poured into them. Their conclusions are now long forgotten and were hardly noticed when they were published. One key conclusion was that in the case of most of the arts, the widening of opportunity could best be met by a localized network of buildings and activities. In some parts of Britain that network exists and the task is to build on what is already there - in others it needs to be firmly established.

Kipling's poem to which the Arts Council has given a new prominence and a new meaning is much concerned with the obsolescence needed by those who would be proper gardeners. The arts are hard taskmaster, art and tenacity belong together, and too much of what is offered under the guise of greater participation is shoddy and unrewarding; there are too many one-off systems of mediocrity.

But when they've had their fill of Kipling, arts planners and policy-makers should look again at what Ralph Vaughan Williams had to say about art. In a lecture in 1931 Vaughan Williams pointed out that "You can hardly expect a garden to be able to cultivate beautiful flowers in a soil which is so barren that no wild flowers will grow there. Must we not presuppose that there must be wild flowers of music before we occupy ourselves with our hydragas and Gloire de Dijon roses?"

The author is a research fellow at the Policy Studies Institute and author of *The Politics of the Arts Council*. This article is his first speech given to the Council of Regional Arts Associations at Malvern.

Equal opportunity educators

It is not to the credit of universities that the question of opportunities for ethnic minority students should arise in the first place; the system secures its future; and it is no surprise that the minority communities show suspicion about the motives of new advocates of equal educational opportunity.

The proportion of young people from ethnic minority communities is growing (in British society) and if they are to advance it is necessary that they gain access to higher education. Universities will not succeed in attracting ethnic minority students - for whatever motive - without a fundamental review of their methods of operation. A policy of equal opportunities involves more than a statement of aims.

Discrimination within the school system is acknowledged. The needs of black minorities still are not met. There are a number of reasons for this - a Eurocentric school syllabus; inadequate English as a second language provision; failure to teach basic skills in the student's mother tongue; teachers' low expectations.

In so far as student selection is based on school achievement records and headteacher's references, an indirect bias is built into the system. To eliminate this would require a fundamental review of university admission policies, replacing the Robbins principle that courses should be open to all "qualified by ability and attainment" by the principle adopted by the University Grants Committee in its recent advice to Government that "courses of higher education should be available for all those who are able to benefit from them".

Given the unreliability of information from schools, the question is, short of an open access system, what is the best method of selection? Interviewing has a role to play. The Commission for Racial Equality's *Code of Practice for the Elimination of Racial Discrimination* and the

Promotion of Equality of Opportunity in Employment gives guidance on selection and interviewing techniques. Although aimed at employers some of the provisions are relevant to the university selection process. In particular:

- overseas qualifications which are comparable with UK qualifications should not be assumed to be inferior;
- selection tests which contain irrelevant questions on matters which may be unfamiliar to racial minority applicants should not be used;
- reception staff should be instructed not to treat applicants from particular racial groups less favourably than others;
- staff responsible for shortlisting, interviewing and selecting candidates should be clearly informed of selection criteria and of the need for their consistent application, given guidance or race can have on decisions, made aware of misunderstandings that can occur between persons of different cultural background;
- wherever possible, shortlisting and interviewing should not be done by one person alone.

Interviewing is a skilled technique and members of staff regularly engaged on interviewing should be trained in interviewing and selection techniques with an emphasis on avoiding discrimination. To demonstrate their commitment to racial equality, many employers state in their literature and advertisements that they are equal opportunity employers. In the case of universities such a statement could be prominently displayed on prospectuses and other material. In circulating material care should be taken to ensure that inner city schools with large black populations receive equal treatment to schools with an established university tradition. Consideration could also be given to advertising in the ethnic press.

Where students have particular cultural or

religious needs, the institution must ensure that these are met, for example, the provision of vegetarian meals for Hindus and ensuring that students are able to observe prayer times and religious holidays.

Black women suffer particular problems. The cultural tradition may involve a parental prohibition on women living away from home before marriage. In some cases permission to live away from home would only be granted where the student is assured of on-campus accommodation. The university has a responsibility to ensure that all within the university community are treated with respect. Racist behaviour, whether by members of staff or students (or associated outside agencies and individuals), must be treated severely, with dismissal or expulsion as the ultimate remedy.

The Commission for Racial Equality recommends monitoring of the effects of selection decisions, practices and procedures. Within university an effective equal opportunities policy would be impossible without monitoring provision. The best way of monitoring is by records showing the ethnic origin of staff, students, applicants for jobs and applicants for admission.

For student admissions the ideal solution would be for the universities central council on admissions to monitor ethnic origin. Offers, acceptance and admissions could then be broken down on an ethnic basis in respect of each institution or department. The exercise could be continued after admission by each institution recording standard basis.

Selection criteria and procedure could then be reviewed to ensure that they do not include requirements or conditions which constitute or may lead to indirect discrimination. The information would need to be regularly analysed and a number of key questions asked. Is there evidence

Universities must review their admissions policies says Martin Coleman

that individuals from any particular racial group do not apply to particular institutions or for particular courses or do fewer apply than might be expected; are concentrated in particular institutions or courses; achieve less well than individuals from other racial groups; are failing to enter certain careers or postgraduate courses or are doing so in fewer numbers than might be expected.

The curriculum is not exempt from the possibility of racist bias. There is an understandable reaction against suggestions of interference with the content of courses. However, an effective anti-racist programme cannot ignore the curriculum. In approving new courses or reviewing existing ones university authorities should insist that the curriculum, syllabus and teaching reflect the institution's anti-racist policies.

These suggestions will not be welcomed by those who believe that academic freedom requires that the lecturer has complete discretion of all aspects of university life. In the United States the introduction of equal opportunities policies have produced institutions to fundamentally review procedures, policies and philosophy with spin-off effects in the area of anti-racism. For example, employers are urged to review job descriptions to eliminate racist bias have discovered that in many cases the formal job description bears little relation to the work being done and this has led to a review of qualifications required for particular jobs.

Within universities serious thinking about admissions policies or curriculum within the context of an equal opportunities statement may raise wider issues. In this way an equal opportunities policy could be the stimulus for much needed changes in the system.

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BOOKS

Political intrigues at close quarters

by H. T. Dickinson

Memoirs of King George II
by Horace Walpole
edited by John Brooke
Yale University Press, £65.00 (three volumes)
ISBN 0 300 03197 1

Historians have long recognized Horace Walpole's *Memoirs of King George II* as an immensely valuable source of information for the politics of the 1750s. Unfortunately, scholars have always had to work with inadequate editions of these *Memoirs*. Initially inspired and encouraged by the industry and resources of W. S. Lewis, Yale University is in the process of producing a new edition of Walpole's major work. Under the direction of W. S. Lewis himself a scholarly edition of the *Correspondence of Horace Walpole* has been published in some 48 large volumes. Now, John Brooke, who acknowledges the support of the late W. S. Lewis, has produced a magnificent new edition of Walpole's *Memoirs of King George II* in three handsome volumes. As a former senior editor of the Royal Commission on Historical Manuscripts, as the author of several important works on 18th-century British politics, and as a close collaborator with Sir Lewis Namier, John Brooke was an excellent choice as editor of these *Memoirs* and he has performed his duties with conspicuous success.

Walpole's *Memoirs* first appeared in print in 1820 and subsequent editions, with minor revisions, appeared in 1846 and 1847. Unfortunately, these editions cut out nine passages which the first editor, Lord Holland, regarded as indecent or ill-remembered remarks based on rumour. These alterations reflected adversely on the character of particular individuals. This new edition restores these excised passages and includes Walpole's original marginal notes, the dates when he completed portions of the *Memoirs*, and the differences in meaning (though not in style) between the foul and the fair copies of the manuscript. John Brooke has also greatly added to the usefulness of this edition by providing full annotations, 12 appendices upon a superb index. Thousands of footnotes identify every individual mentioned in the text and frequently clarify obscure incidents. The appendices include other political writings and speeches of Walpole that have either never been printed before or have never been reprinted since their first appearance. The last appendix reproduces the drawings which were intended as head and tail pieces for the first five of the eventual 10 books of the *Memoirs*. These appeared in the 1820 edition, but not in those of 1846 or 1847.

Horace Walpole clearly contemplated the eventual publication of his *Memoirs* and laid careful plans for their appearance some time after his death. He deliberately wrote for posterity which he rightly judged would be



Horace Walpole, painted in 1754 by John Giles Eccardt

interested in the convolutions of 18th-century politics and in the intrigues of the leading politicians of his own day. His *Memoirs* were designed to enlighten readers rather than to entertain them. At one point he declared, "I am positively sure that my *Memoirs* will be full of anecdotes, character sketches and trifling details, but he believed that only a contemporary witness could provide posterity with such evidence and he hoped that this material would "lend some future and more assiduous historian to an intimate knowledge of the men whose councils or actions he shall record".

Walpole's judgement has been vindicated by generations of historians. His *Memoirs* are regarded as an invaluable source of information, particularly because he provides evidence which is not to be found elsewhere, but also because he provides his own highly-subjective view of events which he was in a position to observe closely. Walpole recognized that his opinions were subjective and he explicitly warned his readers to be on their guard. He is an excellent witness, not because he was an impartial, dis-

interested or distant observer of the political scene, but because he recorded many events of which he had an intimate, almost unvarnished, knowledge and because he gave his candid opinion of all the principal politicians of the day while freely admitting that he loved some and hated others.

The value of Walpole's *Memoirs* is greatly enhanced because the author knew that he was led by his emotions and made no secret of his prejudices and because he did not seek to rewrite or doctor his account long after the event. Only in two places did Walpole make alterations, and those were minor changes to his original text in the light of subsequent knowledge. The *Memoirs* he gave very different characters to some of the principal actors on the political stage. He confessed that, since he had closely observed these politicians over many years, it was not surprising that either they had changed over this period of time or his opinions had altered as their conduct differed or he came to know them better. In deciding not to amend his earlier judgements of them so that they would

conform to his later opinions, Walpole inspires confidence in his honest intentions if not necessarily in his impartiality. He undoubtedly strove to write his *Memoirs* soon after the events that he described and eschewed the opportunity to change them in the light of later developments.

Walpole's *Memoirs* are full of details about the military events of the Seven Years War, but these are not of very great value to the historian because Walpole derived his knowledge from newspapers and magazines. Where the *Memoirs* are invaluable are in those numerous portions which provide detailed evidence of ministerial intrigues and parliamentary debates. Even here, however, they are more useful for the early 1750s than for the late 1750s because Walpole was closer to the events which he describes and he had better sources of information because of his friendship with such politicians as Henry Fox. For much of the decade Walpole knew all the great politicians involved in the struggle for power and place, he sat in Parliament and he was an assiduous collector of information about public events and political intrigues. His chief source of information was Henry Fox, who was at the heart of the ministerial struggles of the mid-1750s, but he also gathered evidence from the Duke of Bedford and his own cousin, Henry Seymour Conway.

His many excellent accounts of parliamentary debates rest upon first-hand knowledge of Walpole heard from himself. He insisted that he had taken detailed notes at the time and that his accounts of them were more authentic records than the more elaborate orations which later appeared in the public prints. Walpole presents unrivalled evidence for the parliamentary debates on such major issues as the Regency Act, the Marriage Act, the Militia Bill, the repeal of the Jewish Naturalization Act and the question of war or peace in the mid-1750s. Moreover, his interest in different types of oratory and his impression of the talents of many of the greatest speakers in parliament make his *Memoirs* a valuable source for assessing the impact which these speeches made upon the House of Commons.

Historians have long agreed that Walpole's *Memoirs* are an immensely valuable source of information for the ministerial intrigues of the 1750s and for a number of major parliamentary debates. On these subjects Horace Walpole provides evidence which is not always available from other sources and which, when it can be tested, proves to be remarkably accurate. On other issues, however, Walpole was far from impartial, as he himself readily admitted, and historians are very wary of the use to be placed on his *Memoirs*. Yet this evidence is among the most fascinating in the *Memoirs*, precisely because it does emanate from Walpole's deep and personal engagement in specific incidents or with particular indi-

viduals. In these instances Walpole's account may not be accurate, impartial or disinterested, but it does reveal much about Horace Walpole himself and about the climate of opinion in his day.

Although he was rather insensitive to political ideas, Walpole had decided sentiments and refined sensibilities. Two dramatic incidents - the courts martial of first Admiral Byng and then later of Lord George Sackville - reveal his capacity for passionate involvement in public affairs. Accounts of the legal proceedings can be bettered elsewhere, but there is no better source than Walpole's *Memoirs* for an understanding of the motives of those involved in both pressing the charges and defending the accused. Walpole's own judgement of Byng's trial is a remarkable combination of emotional commitment, bitter criticism and sound common-sense.

In this celebrated case Walpole's judgement accords well with that of modern historians, but his character sketches of the principal politicians of the 1750s, which are a particular feature of his *Memoirs*, have often been condemned by modern historians even though these sketches have not been without their influence on major scholars. There can be no doubt that Horace Walpole was a great hater and that one of his motives in writing his *Memoirs* was to vindicate the reputation of his father, the great Sir Robert Walpole. He confessed as much himself. Thus, his character sketches of those politicians who had opposed his father or who, like Newcastle, Hardwicke and Henry Pelham, could be accused of betraying Sir Robert Walpole, were invariably critical. Horace Walpole's character sketch of Newcastle is particularly bitter and is, unrelieved by any effort to detect any virtues in the Duke and yet, paradoxically, it is this sketch which has had the most profound and prolonged effect upon the historians. Until recently very few historians have seen much to praise in Newcastle and only in the last few years have his merits been properly assessed. In learning to combat Walpole's prejudices, however, it would be unwise to dismiss all of the character sketches in his *Memoirs*. Walpole himself claimed, "It is difficult to a few persons probably sharpened his eyes to their faults, but he hopes never blinded him to their virtues". In general this is a fair assessment. Although he was too conscious of the faults of some politicians, he could usually detect their virtues even if he did not give sufficient weight to them. He liked Henry Fox and he hated William Pitt, but he had the intelligence to recognize the virtues of the former and virtues of the latter. Most of his character sketches, like much of his *Memoirs* in general, will amply repay the serious study of any scholar.

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The vitality of party divisions

British Parliamentary Parties 1742-1832: from the fall of Walpole to the first Reform Act
by R. W. Hill

Allen & Unwin, £18.00 and £7.50
ISBN 0 04 942187 5 and 942188 3

They talk much of a general union of party, an even greater to be wished by the country, and my only reason for disbelieving it, is that I look upon it as impracticable, a stronger word than impossible. Brian Hill's new book goes far towards explaining why Lord Mount Stuart's sombre tone in 1784 was justified. His theme is the vitality of party divisions and their essential role in the political history of the period. The significance of the patronage nexus,

the importance of politically independent client groups and the intelligence of Sir Lewis Namier are all challenged, and the reader is left in no doubt that politics conformed to a Whig-Tory alignment, with the Whigs dominant until 1760 and the Tories in control for most of the rest of the period. The breaking of Whig dominance is attributed to George III whose villainy is discerned by Dr Hill on numerous occasions. Indeed the malevolent influences of George III and of Namier are clearly viewed as a challenge, to be surmounted equally by the strength of party integrity.

As a textbook this work has much to commend it. If it is not quite as useful as Dr Hill's previous work, *The Growth of British Parliamentary Parties, 1689-1742* (1976), that is largely because several recent textbooks have tackled the bulk of the latter period, particularly Frank O'Gorman's *The Emergence of the British Two-Party System 1760-1815* (1982) and Brian Christie's *Wars and Revolutions: Britain 1760-1815* (1982). But Dr Hill writes clearly and well and the student wishing to follow the tortuous formation of ministries will find on the whole

an excellent guide here, though the replacement of Chatham by Grafton should possibly have been explained. Those who seek for more will be disappointed. Perhaps the job of a textbook is to answer rather than to ask questions, but such an approach does not lead to works that are in advance of their subject. Observant students will note that Dr Hill is more concerned about debates associated with Namier, who died before most of them were born, than with more recent controversies. The opening chapter "History and Historians" is almost exclusively devoted to refuting Namier. This helps to give the book a somewhat dated flavour, and the absence of any hints of revisionism does not help. For example, given current interest in the strength of Conservative ideology in the period it is not good enough to simply state that "theories of Divine Right and Passive Obedience went into disfavour". A more subtle exposition of the ideological, social and political attitudes of politicians and of the political nation might have permitted a more balanced view of the role of the monarchy. Dr Hill underestimates the power of George I

and George II, ignoring in particular the effect of wartime exigencies on George II's bowing to the Old Corps in 1744 and 1746. Recent work on the 1750s has pointed to the continued influence of the king, and in that context George III seems less innovative than Dr Hill portrays him. Furthermore, an emphasis on public attitudes to monarchy in the late 18th century might call into question the book's view of George III as a headstrong incompetent.

Dr Hill has a clear view of what should have occurred. Powerful legislatures, a strong party system, a weak monarchy and frequent changes of administration he regards as progress. Hence one is informed that "despite the reforms of such rulers as Frederick II, Catherine II, Joseph II... the absence of legislatures remained endemic in most countries." Rapid alternation of the major parties in government, "the promise of the decades before 1714", was unfortunately then delayed until after 1832.

"They the Ministry have lost several members but I take it for granted, that before the end of this session, the majority will be just as great as ever;

the House of Commons is and always will be the House of Commons", observed Lord Robert Spencer after the 1774 elections. Though a book on parliamentary politics, more could have been made of the relationship between parliamentarians and their constituents. Comments on institutional and procedural developments would not have been out of place. "Money must be got and the House of Commons alone can give it" wrote Charles Delafaye in 1761, and it is easy to overlook the particular problems posed by war finance for parliament. Management that existed for much of the period. The dry husk of political manoeuvre is often of no historical value unless linked to a study of the substance of policy and policy disagreement. Parliament, little more than a seasonal aspect of the political world in the 18th century, cannot be divorced from the rest of the political nation.

Jeremy Black

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BOOKS

Loss of faith

A Path from Rome: an autobiography
by Anthony Kenny
Sidgwick & Jackson, £15.00
ISBN 0 283 98964 5

The Ivory Tower: essays in philosophy and public policy
by Anthony Kenny
Blackwell, £15.00
ISBN 0 631 19850 1

The Logic of Deterrence: a philosopher looks at the arguments for and against nuclear disarmament
by Anthony Kenny
Firethorn Press, £4.95
ISBN 0 947752 07 2

The scholarly tradition in Catholicism imbued its adherents with a conviction that reason, rightly used, should guide one's religious attitudes and principles of behaviour. The ideal of a harmonious synthesis of reason and practice received its religiously most poignant expression in the declaration of the First Vatican Council that the existence of God could be known by natural reason. But reason's apparent triumph was for many Catholics a religious disaster, as a realization of the evident invalidity of all existing proofs of God's existence ultimately deprived them of their faith. Such was the fate of Anthony Kenny after seven years as a priest. His autobiography *A Path from Rome* takes us from his birth in 1931 through his clerical studies, first in the junior seminary in Upholland and then at the Gregorian University in Rome, and his ordained ministry in Liverpool up to his laicization in 1963. Having worked for a philosophical doctorate in Oxford on the way, he was soon elected to a fellowship at Balliol College, where he is now Minister.

Kenny's loss of faith did not mean a repudiation of everything in the scholastic tradition. Quite the contrary, as the two books on philosophy and public policy make clear. In both there is an over-riding emphasis on judging actions by reference to the intentions of their agents: an act performed with wicked intentions is not to be morally justified because of any supposedly good consequences. Thus, in accord with the medieval "just war" tradition, which Kenny explicitly endorses, even in a just war the deliberate killing of non-combatants is always wrong. A nuclear strike against a city, then, is necessarily evil: in both *The Ivory Tower* and *The Logic of Deterrence* the heart of Kenny's case against NATO's nuclear deterrent is that its credibility depends on our training people to carry out orders to do just that. Kenny's case for nuclear disarmament, unilateral if need be, is made out in both books, though in essence it dates from 1961 when he was still a priest. His arguments are undoubtedly strengthened by resting neither on any generalized pacifism, soldering being for him a "noble" profession, nor on any love for Soviet communism, about which he has no illusions. But, in his own words isn't the "merely condition-

al willingness to engage in massacre... a slight and almost metaphysical evil to weigh in the balance against the good of preserving the peace?" His answer is to insist that someone prepared to use the deterrent if it comes to the crunch is a man who already has "murder in his heart".

The Ivory Tower contains essays on the law as well as on war. In two of them, on the legal definition of murder, the notion of intention again holds centre stage. Against the Benthamite view that mere foresight of risky consequences can sometimes be enough to make an act murder, Kenny argues that murder ought to involve a direct intent either to kill or to create a serious risk of death. If mere foresight of risk was enough, surgeons will often be doing potentially murderous acts, which have to be excused in some other way, raising the possibility that it can sometimes be lawful intentionally to create a risk to life. (The surgeon, unlike the nuclear deterrent, does not intentionally dole out risks to innocent life, as he would treat his patients in less risky ways if he could.)

Kenny's final position on killing the innocent was not, however, entirely clear to me. Murder is always wrong, and on his proposed definition, one murders and intends to kill if one does something knowing death of the innocent will result. In war, on the other hand, unintended but foreseeable deaths of non-combatants apparently may be justifiable in the course of an attack on a military target, and "the principle here is one of proportionality". Is this a qualification of Kenny's general rejection of the killing of the innocent (which extends, incidentally, to a condemnation of abortion)? Or is it that he is simply reporting on the civil war tradition rather than on his own

position?

Interesting as the essays on public policy are, many readers will find the autobiographical *A Path from Rome* even more intriguing. Those with no experience of such things will be particularly struck by the account of the absurdly ramshackle philosophical training Kenny got at the Gregorian: supposedly a course in scholastic philosophy, it was only in his final year that he actually read any Aquinas and then a minor text. Small wonder that he appreciated the virtues of medieval philosophy only at Oxford. In Rome, he received lectures (in Latin) on 20th-century versions of medieval theses, which included disquisitions on modern biology, physics and experimental psychology. This enclosed and degenerating system of thought had little bearing on anything that went on outside it, and could provide little support for Kenny's faith when he encountered criticisms of it from a less heuristic and rigid style of philosophy. He was led instead to defend his religious beliefs in terms of private "supernatural religious experiences". 25 years later he is astonished at "the thinness of the intellectual underpinning of a lifetime commitment to the service of the Church".

On this, I would make two points. First, we learn very little from the autobiography about the character of the religious experiences in question or of Kenny's inner life generally apart from his intellectual doubts. We see the structure of his life as a seminarian and a priest, but not its content, beyond some reflections on the theatre of the liturgy. There is undoubtedly a problem in describing part of one's past life based on feelings and a world view one can hardly still make coherent to oneself. What would be needed



Anthony Kenny

would be a Proust of the lost religious vocation, but Kenny's literary gifts do not lie in that direction.

Then, secondly, there is the glaring contrast between the claims the Catholic Church makes for natural reason and the achievements of reason on behalf of the Church. Surprising as it might seem to some, on leaving the Church, Kenny told Cardinal Heenan that at Oxford, philosophy affected the way the philosophers there lived in a way it did not at the Gregorian. He also records his disgust at having had to pretend that the papal encyclical *Pacem in Terris* was a document

deserving of respectful scrutiny. Are we then to conclude that reason has no role to play in the assessment and formulation of religious beliefs? Considering the massive potential for harm irrationalism has in any area of importance, I would say just the opposite: that in its admittedly intermittent esteem for rationality the Catholic Church has performed a genuine service to the spiritual development of many of its present and former adherents, Kenny included. It would be a matter for regret if, as many fear, it has lately become more Protestant in its approach to faith. Equally I doubt that many seminaries or schools anywhere, come to that, continue to give the enlightened and genial initiation into classical literature that Kenny received at Upholland.

A final point, though, on Kenny's present thought. Contrasted with the utilitarian calculation of cost and benefit which so disfigures our time (including much of our thinking on war) Kenny's moral absolutism has its attractiveness, but in the absence of a background of faith, enabling us to speak of absolute divine prohibitions, its basis remains obscure. At least, Kenny does not clarify it in these books, beyond admitting that he can no longer comfort himself with the thought of a divine judge standing beside the righteous who have disarmed themselves before the Russian threat.

Anthony O'Hear

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Moral systems

Marxism and Morality
by Steven Lukes
Clarendon Press: Oxford University Press, £12.50
ISBN 0 19 876101 5

Marxism and Morality is the seventh contribution to a series edited by Lukes himself and by Raymond Williams. The aim of the series as a whole is to discuss the relevance of Marxism "to the intellectual discipline concerned", to provide the basic equipment for developing a Marxist theory of that discipline and to make an original contribution to it.

No doubt one should not hold the aims of a series (a nebulous conception if ever there was one) against an individual contributor, even where that contributor happens to be one of its editors. But in this instance the aims of the series do stand in an intriguing relation both to the approach which Lukes adopts and to his eventual achievement. Clearly no one would choose to edit such a series unless they believed that Marxism could in principle make a handsome contribution to the understanding of the subject matters concerned. But in the case of morality it is clear that Lukes himself is at present more than a little ambivalent as to whether this belief is in fact

valid. At the very least – and at the level of purely political judgement – he plainly now feels that the explanatory contribution of Marxist thinking has been more than outweighed in this instance by its dimly practical costs.

Morality itself is, of course, an assemblage of human practices and accompanying sentiments, not an intellectual discipline. It is an aspect of human life. A miscellany of modern academic disciplines (analytical philosophy, social anthropology, psychology, political theory, sociology, even – God help us – literary criticism) purport to instruct us on how this assemblage of practices is best to be understood. None, on the whole, does so very convincingly. Virtually the entire panoply of modern social institutions (legislatures, executives, courts, schools, churches, medical practitioners, newspapers, families, literary intellectuals, police services, social workers, even football clubs) pesters us with advice (often exceedingly firm) on how we should conceive and respond to its demands on our lives, individually and collectively. Any modern head of government, for example, perforce sets themselves up, at least for a time, the effective national moralist of last instance over a bewildering range of collective choices. Even the most supine of modern parents or schoolteachers offer occasional hints on styles of behaviour that are preferably to be avoided.

In the midst of this cacophony anyone could be forgiven for being in

some doubt as to just what morality really is and just how we do have good reason to envisage and react to its requirements. It would be optimistic (and probably incoherent) to expect any single cognitive perspective to resolve all these doubts. But in the midst of such extreme confusion it is quite reasonable to hope that almost any bold attempt to explain the presence of this assemblage of practices and the particular form which it takes in a given setting might lead to resolve at least some of them.

Marx himself offers a particularly bold approach to explaining both the presence and the character of morality at a particular time and place. Some-what less happily, he also offers a confident but utterly unclear proposal on how best to react to morality's demands. It is not at all apparent that his explanatory approach is even consistent with this proposal; and it is all too apparent that the proposal itself, as Lukes makes admirably plain, disastrously misconceived. The misconception is emphatically political, a misconception about what it has proved, and will in future prove, politically desirable to do. The most valuable feature of Lukes's book is its attempt to trace the lineage of this misconception back to a deficiency in Marx's own analytical approach to the existence and historical morphology of morality. Its principal weakness is the lack of any coherent political or analytical standpoint of Lukes's own from which to appraise either the explanatory orientation of

Marx himself or the political projects of those who have sought to follow his guidance.

The explanatory standpoint from which Lukes criticizes Marx's understanding of morality seems on the whole to be that of the more confidently moralizing strand of recent Anglo-Saxon, utilitarian philosophy. But Marx's own utopian hostility to bourgeois moralizing (in the face of which Lukes wriggles nervously), and his robust assurance that such moralizing necessarily accommodates itself to structures of class power determined by the requirements of the prevailing system of production, makes this a highly questionable approach. In particular they raise with some insistence the question of whether this strand of moral thinking, upon the sentiment does itself really stand upon a clear and valid understanding of the nature and standing of moral practices (a question which has been pressed recently with great force in Bernard Williams's trenchant *Ethics and the Limits of Philosophy*).

Politically Lukes intends his book not as a repudiation of socialist allegiance but as "a contribution to socialist free-thinking"; a genre in which it is of some importance whether it is freedom of thought or vice versa. Within these confines, he shows deftly how Marx himself could hope to combine the sceptical judgement that our urgent negotiations with one another on the scope and limits of decent behaviour have been and remain profoundly shaped by structures of social and economic power with the fashioning of a strategy of aggressively self-righteous political action designed to usher in a social world in which such negotiations could at long last relate into a more desultory and marginal significance. He also shows convincingly the pernicious impact of Marx's Hegelian heritage on the resources for self-deception and political evasion open to practitioners of Marxist politics, synthesizing an ethic of pure consequence at the end of history with an ethic of the most unbridled and feckless intentions in the sorry meantime of real political action.

Marxism and Politics is an honourable, instructive and impressively able book. But it is distinctly more successful at showing why Marxism is such a treacherous guide to political conduct than it is at suggesting how we should in fact understand morality ourselves or how we might hope to fashion a less erratic and more trustworthy approach to political action.

John Dunn

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Christopher Hookway

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BOOKS

Prize wrangles

The Beginnings of the Nobel Institution: the science prizes, 1901-1915
by Elizabeth Crawford
Cambridge University Press, £22.50
ISBN 0 521 26584 3

Alfred Nobel, wealthy Swedish industrialist and inventor of dynamite, died on December 10, 1896. His will was opened five days later. It stipulated that the bulk of his huge fortune should be distributed annually in the form of prizes to those who during the preceding year had with "discovery", "invention", or "improvement" conferred the "greatest benefit on mankind". Unfortunately the brevity of the will, and its contestation by the Nobel family, led to a lengthy legal battle which was only won after the media, the Swedish state, and major scientific institutions had lent their support. The first prizes were awarded in 1901.

Common-sense robots

Smart Robots: a handbook of intelligent robotic systems
by V. Daniel Hunt
Chapman & Hall, £30.00
ISBN 0 412 00531 X

Assembly with Robots
by Tony Owen
Kogan Page, £14.95
ISBN 0 85038 930 5

We are now seeing the second generation of robotics. The first generation consisted of the "dumb, dumb and blind" robots which were little more than programmable arms. The first of these was installed to unload a die-casting machine at a General Motors car factory in Trenton, New Jersey, way back in 1961. Without any ability to sense the environment, these first-generation robots were nevertheless ideal for tasks such as repetitive spot-welding, transport of objects, or spraying of such things as car panels. The main trouble was, however, that these early robots would continue mindlessly to spray the panel even if it was not there.

Almost two decades after the first introduction of robots into industry, massive increases in the sophistication of affordable computing meant that fundamentally new designs of robotic systems began to move tentatively out of the research laboratories, where they had been developed for over a decade, and into appropriate applications in industry. These second-generation robots were potentially capable of using sensory information about their immediate environments to alter their behaviour when performing a given task. At last, it was possible to design an industrial system in which if the car panel was not in front of the spray-painting robot when it should be, the robot could sense that something was wrong and act accordingly. Still more difficult, if a component the robot was to pick up was wrongly positioned, the robot could potentially compensate for its positioning error.

Such second-generation robots were immediately dubbed by some, wryly, as "intelligent robots". In reality, they are at best "common-sense robots". Even the next generation of robots, only now just beginning to appear in the most advanced research laboratories, may fall short of anything but very low-level machine intelligence. Interestingly, however, second-generation robots have not supplanted the older designs. Why should they? Simple, repetitive, highly structured applications can frequently be performed perfectly adequately without any sensory data from the surroundings. Consequently, the older designs of robot are quite up to the tasks. Indeed, the second-generation robots have found their niche in new applications such as assembly and arc-welding

When in 1974 the Nobel Archives of the Swedish Royal Academy of Sciences opened its doors to research, they gave historians the opportunity to find out what went on behind what has traditionally been one of science's most hallowed and secretive institutions. In making some of its records public, the Royal Academy perhaps wisely restricted material to prize decisions dating back 50 or more years. In this book based upon the archives, Elizabeth Crawford examines how the Nobel institution was established and the first 15 years of the awards for physics and for chemistry.

Her account is meticulous and scholarly. It is the kind of history which carries its message in a plethora of detail – the book is all the better for it. The story Crawford presents is what we have always suspected. Nobel prize decisions are no better or worse than any other decisions where a range of competing interests have to be settled by a small group of people: all the power struggles, personal vendettas, social contingencies, and processes of consensus formation are there to be seen.

Because the Nobel prize money was so much larger than any previous awards in science and because the country with the responsibility for implementing Nobel's wishes – Sweden – was not one of the dominant national science traditions, it is not

surprising that the Nobel institution fell prey to the attempts of Swedish scientists to gain ascendancy both within Swedish science, and within the international scientific community. The role the prize money would play was evident even before the institution was established. Efforts were made to use the money to fund special laboratories and research facilities in Sweden.

Dominating the Nobel committees' deliberations were bottles from the Uppsala University group of experimental physicists, with their very narrow definition of what constituted physics – a definition which left no room for mathematical and theoretical physics and the more eclectic approach of the physicists at the newer Stockholm Hogskola. As the Uppsala group were well represented on the Nobel committees, the only way to outmanoeuvre them was by way of the international community, which could also make nominations and influence the final decisions. This emphasizes the strategic role played by the two Swedish scientists with the greatest international reputation – the broad-ranging physicist, chemist, Svante Arrhenius, and the mathematical physicist, Gösta Mittag-Leffler.

Most of the early prizes went to discoveries which had already received acclaim. The debates were not so much over whether they were meritorious, but

over whether they fell within the narrow definitions of physics and chemistry which the committees upheld. Crawford shows that Arrhenius, by virtue of his position on the physics committee and as a nominator for the chemistry committee, was able to exert far more influence on the outcome than Mittag-Leffler, who worked primarily by lobbying his international colleagues in support of particular candidates. The Machiavellian character of the process is indicated in Mittag-Leffler's attempts to obtain the physics prize for Henri Poincaré by persuading French mathematicians to lend their support to the nomination of the Wright brothers for their invention of the aeroplane. The purpose was to keep the mathematicians from supporting Poincaré and possibly damaging his nomination by making his work seem too close to mathematics. This play did not work and Poincaré never was to receive the prize; neither, incidentally, did the Wright brothers – their invention was considered to be too dangerous to bring benefit to mankind.

The deliberations of the committees and particularly Arrhenius's role throws light on such puzzles as why Ernest Rutherford got a prize for chemistry rather than physics (because of a complex plan to get Max Planck the physics prize that year); why Planck did not get awarded until later

(because of the revolutionary nature of his discoveries); and why Walter Nernst did not get an award (because of Arrhenius's personal and scientific hostility towards him).

As with many decisions of this kind, the role of the Nobel committees was not so much to choose a candidate as to justify a particular choice. As Crawford shows, many of the reports written for the committees were not assessments of all the possible candidates but *post facto* justifications of the choice of a particular candidate. That those reports were often prepared by Arrhenius, and even on occasions it seems written by Arrhenius and presented by other scientists, further indicates the personal dominance which he exerted over the early awards.

Crawford's assessment is that the awards were as fair as could be expected in the circumstances. However, whether the later awards, where the scope for argument is so much greater, will match up to historical judgement must be thrown into question. Crawford has provided us with a fascinating glimpse into social decision-making over the highest accolade available within our most celebrated culture of rationality.

Trevor Pinch

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text seems more like an ill-structured pastiche of widely differing subjects. In most cases, the book jumps from an explanation of machine vision systems (now slowly entering the factory) to descriptions of the fundamental designs of robots (these have held good for almost two decades), to a discussion of research on computer recognition of natural English commands (unlikely ever to be suitable for programming industrial robots). Even the bibliography seems suspect: it contains no less than 12 references by an acknowledged expert in artificial intelligence, while omitting many robotics texts.

Assembly with Robots, slightly over 200 pages long, attempts successfully to cover in detail all of the important aspects of a field which many feel may become the major activity for second-generation robots. Although it is difficult to be truly comprehensive on such a complex subject, Owen manages to tackle concisely and systematically each of the major areas, including choice of configuration, cycle-time calculation, grippers, redesign for assembly, feeding, safety, and economics. In addition to a sensible length of bibliography, there is also a useful appendix listing basic information (including cost) on all the assembly robots available in the United States and Britain at the time of printing.

As there are few existing texts on robotic assembly, this most useful addition to the literature would be suitable both for educational use and for those in industry responsible for considering the introduction of robots for assembly.

Peter Scott

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A coach load of late 19th-century visitors tours the world's first national park in Wyoming, from Richard A. Bartlett's *Yellowstone: a wilderness besieged* (University of Arizona Press, £24.95).

Social beliefs

The Metaphysics of the Social World
by David-Hillel Ruben
Routledge & Kegan Paul, £14.95
ISBN 0 7100 9828 X

Many philosophers have a preference for the concrete. Admitting that there are physical objects, possessing physical properties and conforming to physical laws, they hope that there need be little more in a list of what there is. They hold that mental discourse is just a way of talking about physical systems; and they are disturbed by the suggestion that some of our most secure knowledge concerns the arithmetic properties of abstract things like numbers. Evaluative properties can seem equally embarrassing, as can the topic of Ruben's book: are there objects (this favourite example is France) and properties (like being a mayor) which are irreducibly social?

Discussion of this issue typically

focuses on explanation. Are the attitudes and actions of social agents determined by social structures? Or do such structures simply reflect the autonomous activity of a mass of individuals? The resulting close examinations of the work of social theorists like Durkheim, and concern with the bearing of the issue on our sense of ourselves as free, responsible moral or political agents, are carefully avoided by Ruben. He clearly believes that previous writers on this topic are muddled and would benefit from exposure to the careful philosophical analysis that he provides.

Ruben's primary concern is with "metaphysical individualism". He offers a philosophical examination of whether the world contains social "entities" and social properties alongside psychological and physical ones. Unlike the individualist, his answer is affirmative: we cannot identify France with any physical object or any straightforward collection of people; and being a mayor does not just involve possessing complex psychological or physical properties. The final chapter discusses explanation, arguing against the claim that social facts can

ultimately be explained by psychological or physical ones. He also argues that we should not think of the members of a social group as its parts. Hence, the emphasis throughout is upon the integrity or autonomy of the social; Ruben rejects the individualist dogma that, in some interesting sense, all there is to a society or social group are the individuals that belong to it.

The argument is pleasingly analytical and modest: Ruben is ready to admit that many are inconclusive, particularly when he argues against "entity individualism" by eliminating in turn several suggestions about which psychological or physical entities France might be. This leaves it open that better suggestions may be available, and I finished the chapter endorsing Ruben's conclusion that we should not feel that we have put up a stronger opponent might have put up a stronger one. When considering whether France might be a group of people bound by shared psychological states, Ruben only seriously considered the simple cases where these were beliefs specifically about France or something like the French legal system. Several ideas for more complex analyses suggested themselves.

There is an interesting argument for the conclusion that social facts cannot ultimately be explained in terms of beliefs and attitudes (probably with a social subject matter). Ruben glosses over the tempting view that a true belief is rational if it would be true if it were held had it not been true: the true belief that a society is matrilineal is rational if it is "part of its explanation" that the society is matrilineal. Hence, if any true social belief is rational, social facts enter into their explanation. I would have welcomed a fuller exploration of these epistemological themes: this may have quelled the suspicion that either the question is begged against the individualist through a contentious account of rational belief or there is an equivocation on "explanation".

Ruben's careful, patient analysis provides a substantial challenge to philosophers sympathetic to individualism.

Christopher Hookway

Dr Hookway is lecturer in philosophy at the University of Birmingham.

Bonded to metals

Metallo-organic Chemistry
by Anthony J. Pearson
Wiley, £36.00 and £9.95
ISBN 0 471 90440 6 and 90446 5

The rapid growth of chemistry towards the end of the last century led to its fragmentation into more specialized subdivisions of inorganic, organic and physical. This convenient, though artificial, partitioning has profoundly influenced the way in which the subject is taught and has had a lasting influence on the organization of academic chemical laboratories. One consequence of the adoption of these subdivisions was that it hampered the development of those areas of chemistry which lie at the boundaries. It was not until the 1950s, therefore, that organometallic chemistry – the study of those chemicals having fragments or organic molecules bonded to metal atoms – began to emerge as an independent branch of chemistry.

Organometallic chemistry proved to be an area which attracted not only

some of the more able inorganic chemists, but also a great deal of industrial support. The academic interest lay in the large number of novel molecular structures and reactions which emerged from the study of organometallic compounds. The new structures stretched the current theoretical dogmas to breaking point and encouraged the creative academic mind to seek more general concepts of chemical bonding. For the industrialist, investment in this new area of science resulted in the development of new catalysts which facilitated the conversion of cheaply refined oils into highly profitable plastics and pharmaceuticals. The importance of these developments was recognized by the award of Nobel prizes to Karl Ziegler and Giulio Natta for the development of catalysts for the industrial production of high-density polyethylene and polypropylene and to E. O. Fischer and Geoffrey Wilkinson for their elucidation of the structure of ferrocene, a novel compound with an iron atom sandwiched between two organic planar rings.

Although the spectacular development of this area of chemistry has been well documented in review articles and more recently in Pergamon's *Comprehensive Organometallic Chemistry*, an impressive nine-volume compilation, the subject has lacked an up-to-date and authoritative undergraduate text which clearly outlines the basic assumptions of the subject and illustrates its applications in organic and industrial chemistry. However, as the subject lies at the boundaries of inorganic and organic chemistry, this is not an easy task: formalisms for classifying the compounds and their reactions must be developed which are consistent with the current views in both subdivisions.

Metallo-organic Chemistry does not attempt such a major re-evaluation of the subject, but sets itself the more limited aim of making organometallic chemistry amenable to organic chemists who are increasingly using organometallic reagents in the syntheses of complex molecules. Chapter one provides a brief account of the bonding interactions between unsaturated organic molecules and transition metals, using an approach based largely on the concepts of frontier molecular orbital theory. In addition, the inert gas rule is dealt with in a phenomenological fashion. The approach is conservative and skirts around difficulties in classification based on oxidation state formalisms and the manner in which the role of the metal can be

modified substantially by ligand effects.

Chapter two covers a wide range of reactions characteristic of organometallic compounds, particularly those reactions which are important for understanding their role in homogeneous catalytic processes. Although no attempt has been made to reorganize this material in a new fashion, the coverage is catholic and well documented. The remainder of the book provides a systematic account of the reactions of organometallic compounds, organized on the basis of the number of carbon atoms coordinated to the transition metal. This mode of classification is used as a framework for highlighting the application of the compounds in organic syntheses.

This workmanlike rather than scholarly book is unlikely to influence greatly the way in which the subject is taught to undergraduates. Nevertheless, given its more limited aims, it should serve as an effective introduction to the relevant literature for organic chemists.

D. M. P. Mingos

D. M. P. Mingos is lecturer in inorganic chemistry at the University of Oxford.

Universities continued

UNIVERSITY OF LIVERPOOL

Centre for Mathematical Software Research

Director: Professor L.M. Delves

This new Research Centre has been established to provide a focus for the university's research programs in the area of scientific computing, and to formalise its expanding links with industry in this area. Research subjects covered by the Centre include:

Mathematical and statistical algorithms development
Modelling
Scientific and engineering software techniques
Parallel processing techniques
Software testing techniques

Applications are invited for the following posts:

Post 1: INDUSTRIAL DIRECTOR

The Director will be responsible for initiating and developing research links with national and local industry, and for maintaining these links on a day to day basis. He will also participate in the research programme of the Centre, both directly and by supervision of staff on short term research contracts.

Initial salary will be in the range £10,330-£17,190 per annum (under review).

Post 2: SENIOR RESEARCH ASSISTANT/RESEARCH ASSOCIATE - Finite Element Methods for Parallel Processors

This is a two year research post, funded by SERC, to work on the development of Finite Element techniques and software for the ICL DAP as part of collaborative project with Queen Mary College, London. Both local and national DAP facilities will be available. Initial salary will be in the range £7,520-£9,390 per annum (under review).

Posts 3 and 4: SENIOR RESEARCH ASSISTANT/RESEARCH ASSOCIATE - Software Test and Reliability Techniques

These are one and two year posts, funded by SERC/Avey, to work on the development of new techniques and software for the production and testing of highly reliable programs. The Centre is currently starting work on three Avey projects in this general area, and the successful candidates will join the group most closely related to their interests and experience. Initial salary will be in the range £7,520-£10,720.

Post 5: SENIOR RESEARCH ASSISTANT - Scientific Libraries in Ada

This is a two year post, funded by EEC/NAQ, to work on a multi national pilot project to establish techniques for the production of a scientific library in the new programming language Ada.

Initial salary will be in the range £7,520-£9,920 per annum (under review).

Applicants should have a higher degree in an appropriate area, and should have demonstrated research interests and ability in one or more of the areas covered by the Centre.

Applications, together with the names of three referees, should be received not later than 30 September 1985, by the Registrar, The University, P.O. Box 147, Liverpool, L69 3BX, from whom further particulars may be obtained.

Quote Ref. RV/180

(72078)

Cambridge
Girton College
RESEARCH
FELLOWSHIP

Applicants are invited for a Research Fellowship for three years, from 1 October 1986 for three years, in an Arts subject. The Fellowship is open to men and women of any age, and is normally held by persons who are normally below the age of 35 years.

The emoluments of the Fellowship are £25,000 per annum, plus a small allowance for research expenses. From 1 October 1986 the Fellowship is for a person who has not completed a Ph.D. in the subject of the Fellowship, or a person with a Ph.D. in the subject of the Fellowship, or a person with a Ph.D. in the subject of the Fellowship, or a person with a Ph.D. in the subject of the Fellowship.

Further particulars and application forms may be obtained from the Registrar, Girton College, Cambridge CB3 0ET. Applications should be sent to the Registrar, Girton College, Cambridge CB3 0ET, by 1 October 1985.

Since the College is advertising for a Research Fellow in the Sciences as well as applicants should state when writing for an application form whether their subject of research is in the Arts or a Science subject.

It is likely that those stipends will be increased by the cost of living increase allowed to University teaching officers. (51770) R1

University of
Hong Kong
DIRECTOR
OF THE CENTRE OF
ASIAN STUDIES

Applications are invited for the post of Director of the Centre of Asian Studies, established in 1962, and an appropriate academic standing, and a minimum of five years' experience in the field of Asian Studies. The successful candidate will be responsible for the academic and administrative development of the Centre, and will be expected to contribute to the University's research and teaching in the field of Asian Studies. The Centre is currently undertaking a major project on the development of a new curriculum for the Centre, and the successful candidate will be expected to contribute to this project.

Further particulars and application forms may be obtained from the Registrar, University of Hong Kong, Pokfulam, Hong Kong. Closing date 30 September 1985. (51800) R1

University of
Oxford
Bodleian Library
LIBRARIAN

Applications are invited for the post of Bodleian Librarian, which is a full-time post, and is responsible for the Bodleian Library's collection of rare books and manuscripts. The successful candidate will be responsible for the acquisition, preservation, and access to the collection, and will be expected to contribute to the University's research and teaching in the field of library studies.

Further particulars and application forms may be obtained from the Registrar, University of Oxford, Oxford OX1 2JF. Closing date 30 September 1985. (51800) R1

THE PAPUA NEW GUINEA
UNIVERSITY OF TECHNOLOGY
Lae

Applications are invited for the following Departments:

Department of Civil Engineering
(Lecturer in Structural Engineering)
Applicants should possess a good degree in civil engineering and practical experience in the design and construction of structures. (1) public health; (2) geotechnics; (3) construction management. Closing date 4 October 1985.

Department of Electrical and Communication Engineering
(Senior Technical Instructor)
Applicants are invited for the post of Senior Technical Instructor, which will be available from January 1986. Candidates should have a higher certificate/diploma degree qualification and relevant industrial experience. Preference will be given to candidates with teaching experience/qualifications and experience in communication systems or broadcasting. Closing date 11 October 1985.

Department of Mathematics
(Lecturer)
Applicants must be appropriately qualified and should have a demonstrated teaching and research ability. The Department of Mathematics provides the courses in Mathematics and statistics for students reading for degrees in Architecture, Accounting and Business Studies, Agriculture, Chemical Technology, Engineering, Forestry and Surveying. The Department also runs a postgraduate Diploma in Engineering Mathematics, which consists mainly of work in mathematical methods, applied statistics and numerical analysis. It is therefore anticipated that the applicant will have an interest in applications of mathematics and/or numerical analysis and computing, or statistics. Closing date 4 October 1985.

Salary: Lecturer (Senior Technical Instructor) £17,555 per annum. Lecturer (Senior Technical Instructor) £18,405 per annum (K1 - Sig. 0.7215 approx.). level of appointment depending upon qualifications and experience.

Initial contact period is for three years. Other benefits include a gratuity of 24% based on 2% super for approved research, appointment and repatriation leave, leave leave for the staff member and family after 18 months of service, settling-in and settling-out allowances, six weeks paid leave per year, education fees and assistance towards school fees. Free housing, salary protection plan and medical benefit schemes are available.

Detailed applications (two copies) with curriculum vitae, together with the names and addresses of three referees and indication of earliest availability to take up appointment, should be received by: The Registrar, Papua New Guinea University of Technology, Private Mail Bag, Lae, Papua New Guinea, by the closing date specified.

Applicants resident in the United Kingdom should also send one copy to Association of Commonwealth Universities (ACU), 36 Gordon Square, London WC1H 0PF, from whom further general information may be obtained. (72083)

UNIVERSITY OF LONDON:
LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCEDirector of
Information
Technology

The School seeks a Director of Information Technology. This is a new and challenging post of major importance in the School's development in this area. The post will be of professional level in status and salary and will carry with it membership of the Academic Board.

The successful candidate will have a key role in the further development of Information Technology in the School to which the Governors are committed and will be responsible to the Director of the School for:

1. Advising and encouraging the School's departments and their staff in the effective development of the use of computers and information technology.
2. Planning, developing and implementing the information technology policy of the School.
3. Managing and directing the computing and word processing facilities and the staff associated therewith, who currently number about thirty.
4. Liaising and negotiating with bodies outside the School, in universities, government and industry.

The successful candidate will have good academic ability, combined with leadership qualities, administrative and managerial skills.

The appointment is a responsible and challenging one in a leading international academic institution with a close and developing commitment to information technology, and will be supported by a senior School Committee chaired by a School Governor.

The School is willing to consider, for an appropriate candidate, a five-year appointment, with the possibility of renewal, of alternative arrangements.

Further particulars and application forms are available from the Secretary, London School of Economics, Houghton Street, London WC2A 2AE.

Closing date: 23 September 1985.

(72084)

St. John's College
OXFORD
JUNIOR RESEARCH
FELLOWSHIPS (ARTS)
NORTH SENIOR
SCHOLARSHIPS

The College proposes, to elect two Junior Research Fellows (in Arts), and two North Senior Scholars (in any academic subject), from the 1st October 1986. The College will not normally consider candidates who at that date will not have completed a first degree or who in the case of applicants for the Junior Research Fellowships will be over 25, and for North Senior Scholarships will be over 25. The Fellowships and Scholarships are open to men and women. A candidate may be considered for both Fellowships and Scholarships.

A Junior Research Fellow will receive a stipend of £8,458 a year (under review), be entitled to lunch and dine at High Table without charge and will, if unmarried, be given free rooms or, if married, a housing allowance. The Fellowships are tenable for three years, with a possibility of re-election for a further year.

The North Senior Scholarships will be tenable for two years in the first instance but will be renewable for a third year. Eligibility will normally be restricted to UK graduates who at the time of election are aged 21 or over. Successful candidates will be required to work for a higher degree of the University under a supervisor appointed by a Faculty Board. The value of the Scholarships will be equal to the rate for awards from Government, plus academic leave, less the value of the most held at election. At election, the successful candidate will be required to submit a plan of work for the first year.

Further particulars and forms of application may be obtained from the College Secretary, Completed applications should be sent to the College Secretary as early as possible and not later than the 11th October 1985. (72079)

Further particulars may be obtained from The Registrar, University of Oxford, Oxford OX1 2JF, to whom applications should be sent by 31 October with the names of three referees. (51759) R1

UNIVERSITY OF QUEENSLAND
DEPUTY UNIVERSITY
LIBRARIAN

Applicants must be professionally qualified graduates with substantial administrative experience at a senior level in an academic or research library. Familiarity with on-line systems development and modern management procedures is essential. The University Library provides service to one of Australia's largest universities and to medical staff at Brisbane's three largest hospitals.

Salary per annum: \$446,397.

Closing date: 30th October, 1985. Ref. 34985.

Additional information is available from the Secretary-General, Association of Commonwealth Universities, 36 Gordon Square, London WC1H 0PF.

The University of Queensland is an Equal Opportunity Employer. (72080)

UNIVERSITY OF SALFORD
POST-DOCTORAL
RESEARCH FELLOWSHIP

Public Attitudes Towards Psychiatric Disorder

The Department of Sociology and Anthropology, in collaboration with Dr Hugh Freeman of the Salford Area Health Authority, invites applications from sociologists, anthropologists and social psychologists for a research fellowship funded by the Health Promotion Research Trust. The applicant will design and conduct a study of public attitudes towards psychiatric disorder. The appointment, which is for three years, will be made at the post-doctoral level. Initial salary will be within the range £7,520 to £9,880 (under review) plus USS benefits.

Application forms available from the Registrar, University of Salford, 6th Floor, (Tel. 051-738 551 ext 215) to whom completed applications should be returned by 30 September 1985 quoting reference S49/82/THE. Further details obtainable from Professor C G A Bryant, Department of Sociology and Anthropology (Ext 388). (72082)

School of Information Systems

THREE VACANCIES IN
NEW GENERATION
COMPUTING RESEARCH

The DACTL (Declarative Alvey Compiler Target Language) project based at UEA is a key component in the Alvey programme for New Generation Computing. In particular, the pre-qualified Flagship project has been committed to DACTL as the standard interface between Flagship languages and Flagship architectures.

THREE vacancies at UEA arise from this critical project:

(a) RA IA - Salary range £7,520 - £12,460

A strong THEORETICIAN is needed to provide formal guidelines for DACTL development, and to produce a formal definition of the semantics of DACTL. Candidates who offer familiarity with the implementation techniques for Logic and Functional languages in addition to a sound theory background are particularly invited to apply.

(b) RA IB - Salary range £6,800 - £9,820

An IMPLEMENTOR is required to develop and maintain a range of software tools to support DACTL developments on UNIX and other systems.

(c) DACTL will be a key interface between Flagship languages and architectures. A COORDINATOR is required to ensure that DACTL and Flagship developments occur in an harmonious fashion. This post, which is funded jointly by ICL and Alvey, will involve considerable travel. Remuneration is subject to negotiation.

All posts offer unique opportunities to participate in the Alvey programme in New Generation Computing. The length of appointment for all posts is three years.

Applications should be sent to the Dean, School of Information Systems, University of East Anglia, Norwich, NR4 7TA, from whom further information can be obtained. Applications should include one copy of a curriculum vitae and the names of three referees. It is hoped to make appointments within the next 6 weeks. (72077)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72078)

Salary Scale: £7,520 - £12,460. Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72079)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72080)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72081)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72082)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72083)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72084)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72085)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72086)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72087)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72088)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72089)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72090)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72091)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72092)

Further particulars and application forms may be obtained from the Secretary, School of Information Systems, University of East Anglia, Norwich, NR4 7TA. Tel: 01603 692111. (72093)

Polytechnics continued

LIVERPOOL
POLYTECHNIC

Faculty of Business and Management Studies

TEMPORARY LECTURER II
IN BUSINESS STATISTICS
(2 POSTS)

£7,548 - £10,251

Applications are invited from suitably qualified candidates for two temporary one-year full-time posts in Business Statistics from September 1985.

1. Department of Business Studies teaching on undergraduate and BTEC Courses.
2. Department of Management studies lecturing on Management and Professional Courses.

Initial enquiries may be made to Mr. P. Franklin - 051 207 3581 Ext. 2443.

RESEARCH ASSISTANT -
MECHANISMS AND
MACHINES GROUP

£6,800 - £8,460

Applications are invited for the above three year post on a Science and Engineering Research Council supported project under its new specially Promoted Programme (SSP) on High Speed Machinery. The project has the additional support and co-operation of Unilever Research, Port Sunlight.

The work is concerned with the improvement of the high speed efficiency of packaging machines.

Applicants should be good honours graduates in Mechanical or Electrical Engineering or Physics and will be encouraged to register for a higher degree.

For further particulars and an application form contact the Personnel Officer, Liverpool Polytechnic, Rodney House, 70 Mount Pleasant, Liverpool L3 5UX (Tel. 051 207 3581 ext 2518/2519) to whom applications should be returned not later than Friday 27th September, 1985.

Liverpool Polytechnic is an Equal Opportunity Employer and welcomes applications irrespective of race, sex, marital status or disability. (72083)

Financial Controller
Up to £25,827 (under review)

The Polytechnic of Central London is a broadly based institution at the forefront of academic and professional education, research and continuing education. As a major national institution, PCL has a revenue budget of £20,000,000 and a capital budget of £1,000,000 in 1985/6. The Polytechnic intends to appoint a qualified accountant to take overall responsibility for the management of its financial affairs. The position will report to the Rector of the Polytechnic.

Candidates will be qualified accountants, probably aged 35 to 50. It will be useful if the applicant has experience of higher education and will be able to devote part of his/her time to academic responsibilities. The appointee will be required to present statistics for the guidance of committees, prepare and monitor large budgets and reports on a monthly basis. They will also be able to explain financial procedures to people without a financial background.

Further details are available from the Personnel Officer, PCL, 309 Regent Street, London W1R 8AL, to whom applications should be made in writing with full curriculum vitae.

Closing date: 30 September 1985.

PCL IS AN EQUAL OPPORTUNITIES EMPLOYER (72084)

The Polytechnic of Central London

Brighton
Polytechnic
FACULTY OF ART AND DESIGN
Department of Combined ArtsPrincipal Lecturer (0.75)
£13,085 - £16,487 per annum pro rata (pay award pending)

The successful applicant for this new post will be Subject Leader for the Visual Art component of the Expressive Arts degree.

Further details and application forms from the Personnel Department, Brighton Polytechnic, Moulsecomb, Brighton BN2 4AT. Tel: (0273) 693655, Ext 2480. Closing date October 4. (72090)

IMMEDIATE ADVANCES £10k. £10,000. Written form. 51 Dover Street, Tring, Herts. SG11 2JF. Tel: 0494 9934 or 499 34161 600

All advertisements are subject to the conditions of acceptance of Times Newspapers Ltd, copies of which are available on request.

Director
Bristol Polytechnic

Salary: £29877 per annum

Applications are invited for the above post. Bristol Polytechnic, a public sector institution of higher education within the County of Avon, has some 13,000 full-time, part-time and short-course students at post and sub-degree level. It has strong national and regional links with industry, commerce and the professions. As senior academic and principal officer of the Polytechnic, the Director is responsible for its academic operation and standards and for its general administration and management. The successful candidate must therefore have the proven ability to motivate and manage a large organisation and the experience in education, industry or the public service to provide convincing leadership in a period of educational development and advancing technology.

Further details may be obtained from the Clerk to the Governing Body, Bristol Polytechnic, Coldharbour Lane, Bristol BS16 1QY. Applications to be received by 11 October 1985.

Avon County Council is an equal opportunities employer.

Bristol
PolytechnicA Senior Management Role
in Educational Finance

To £18,624 (Grade under review) Hertfordshire

The Hatfield Polytechnic is one of the country's leading higher education establishments and has a high reputation for academic achievement over a wide variety of disciplines in the field of commerce, industry and the professions.

This key appointment of Chief Finance Officer will carry responsibility, as a member of the Polytechnic's senior management team, for the control of all income and expenditure accounting activities, currently amounting to some £20 million annually, as well as a wide range of top level finance work.

It is a highly responsible role calling for a fully qualified Accountant, man or woman, with a broad based finance background and while experience of Local Government would be preferable, it is not essential. What is important, however, is a high level of cost consciousness, administrative ability and well developed interpersonal skills.

Assistance will be given with removal expenses in appropriate cases.

While or telephone for an application form and further details for: The Staffing Officer, The Hatfield Polytechnic, PO Box 109, Hatfield, Herts AL10 9AB. Telephone: Hatfield (07072) 79802. Please quote Ref. TH998

Completed application forms to be returned by 30th September 1985.

The Hatfield
Polytechnic

PRO-RECTOR

The Polytechnic of Central London is a broadly based institution at the forefront of academic and professional education, research and continuing education. The Polytechnic intends to appoint a Pro-Rector to be responsible for staff and student affairs and to support the development of disciplines and professions within the PCL. From time to time Pro-Rectors will take on other responsibilities. It is expected the appointee will complement the existing science and engineering backgrounds of the Rectorate.

The salary is £25,827 (under review) per annum inclusive of London Allowance.

Further details are available from the Personnel Officer, PCL, 309 Regent Street, London W1R 8AL, to whom applications should be made in writing with full curriculum vitae.

Closing date: 30 September 1985

PCL IS AN EQUAL OPPORTUNITIES EMPLOYER (72085)

The Polytechnic of Central London

The following posts are now available:

1. SL/LII in Management Information
Systems
Plymouth Business School

Applicants should have appropriate academic qualifications and industrial or commercial experience, and should be able to contribute at both undergraduate and postgraduate/post experience levels in the area of Management Information Systems.

2. Temporary LII in Marketing
Plymouth Business School
(until 31.8.87)

Applicants should have relevant industrial or commercial experience, and appropriate academic qualifications. They should be able to contribute at both undergraduate and postgraduate/post experience levels in the general field of marketing as well as in more specific areas of marketing.

3. Temporary LII in Computing
Department of Computing
(1.1.88 - 31.12.88)

Applicants for this post in an expanding department should have a good honours degree and preferably a higher degree and/or appropriate industrial/teaching experience. Opportunities will exist for the successful candidate to pursue research and consultancy work.

4. Temporary SL in Electronics,
Digital Systems or Software
Engineering
Department of Electrical & Electronic
Engineering (3 year appointment)

Required to develop novel teaching methods for these subjects for our existing programme in Communication, Information and Electronic Engineering.

5. Research Assistantships/
Fellowships in Intelligent Systems
Department of Electrical & Electronic
Engineering

Applications are sought from lively, creative individuals to augment our existing research programmes, particularly in machine vision, expert systems and AI.

Salary ranges: (pay award pending) LII - £7,548-£12,089 (normally with further advancement to £14,061)
LIVSL - £7,548-£12,089, SL - £11,175-£14,061 (level of appointment dependent upon qualifications and experience)

Plymouth
Polytechnic

Drake Circus, Plymouth, Devon PL4 8AA

TEESSIDE POLYTECHNIC
DEPARTMENT OF
EDUCATIONAL STUDIESSENIOR LECTURER IN
EDUCATIONAL GUIDANCE

Applications are invited for persons with knowledge and experience of the pastoral curriculum in schools and with a good background in the theory and practice of one or both of guidance and counselling. The successful candidate will lead and develop the existing, part-time, in-service Diploma in Educational Guidance. Whilst such leadership will have priority in appointment, applications will be most welcome from candidates who can participate more broadly in the development of advanced N.S.E.T. and research. An application is sought for the 1 January 1986.

Salary scale: Senior Lecturer £11,175 - £13,128 (work bar) - £14,061 per annum.

The salary on appointment will be no greater than £13,128 per annum. Application forms and further particulars of the post and the Department may be obtained from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA. Telephone: (0842) 218121 Extension 4114.

Closing date for applications: 30 September 1985.

'An Equal Opportunity Employer' (72086)

Colleges of Further Education

2 STAFF TUTORS

Salary Scale: £12,522-£16,578 (under review)

Required from 1 January 1986 2 staff tutors with experience in management development and training to contribute to the teaching programme of this expanding College. Applications welcomed from men and women in education, other public sector services, or industry/commerce.

Appointments may be made to permanent posts, or on short-term contracts (3-5 years), or on secondment from present posts (2-3 years).

Further details from the Registrar and Clerk to the Governors, The Further Education Staff College, Coombe Lodge, Blagdon, Bristol BS18 6RG (Tel: 0761-62503) to whom applications should be returned by 27 September 1985.

(22949)

CAMBRIDGESHIRE

CAMBRIDGESHIRE
COLLEGE OF ARTS AND
TECHNOLOGY

PRINCIPAL
(Group 9)

APPOINTMENT FROM MAY 1 1986

Details from Chief Education Officer (DS/CCAT) Shire Hall, Cambridge, or Tel. Cambridge 317939

Closing Date 4th October 1985.

(72068)

EQUAL OPPORTUNITY EMPLOYER

LONDON BOROUGH OF MERTON
EDUCATION COMMITTEE
MERTON IS AN EQUAL
OPPORTUNITIES EMPLOYER
MERTON COLLEGE (FE)

PRINCIPAL (GROUP V)
£21,471 to £22,563
(subject to ratification)

(plus London Weighting £1,038)
Required for January 1986

Applications are invited from candidates who are academically well-qualified, who have taught in Further Education, industrial/commercial experience, although not essential, would be an advantage.

Experience of managing and motivating staff is essential, as is a firm grasp of current trends in further education, including the marketing of vocational courses YTS off-the-job training and MSc involvement in NAFE.

Further information and application forms may be obtained from the Director of Education (STO), Crown House, London Road, Morden, Surrey to whom applications should be returned by 27th September 1985.

(72064)

Cheshire Education Committee
North Cheshire College
Director: William E. Buckley

Applications are invited for the post of

DEPUTY DIRECTOR
(Grade 7)

which is currently vacant consequent upon the appointment of the previous postholder to a Directorship elsewhere.

The College is a major provider of higher, further and community education.

Further details and application forms available from: (SAE please) Head of Administration, North Cheshire College, Padgate Campus, Farnhead, Warrington, Cheshire WA2 0DB.

Closing date for applications: MONDAY 30th SEPTEMBER 1985

ile Inner London
Education Authority

South Thames College,
Wandsworth High Street,
London SW18 2PP

Required for 1st January, 1986.

1. Head of Department of General Studies
(Grade IV)

This vacancy arises due to promotion, and the person appointed will be expected to consolidate and develop the Department's work in light of current developments. The work of the Department is varied and includes the following: pre-vocational courses (including C.P.V.E.); General and Communication studies for B/TEC and CGLI courses; special needs provision; MSC/YTS courses; "Access" courses for adult returners; school link courses.

2. Head of Department of Modern Languages
(Grade V)

This vacancy arises due to retirement, and the person appointed will be required to review and develop the work of the Department. This falls into two main areas: English and Communications, consisting of E.F.L., E.S.L. and G.C.E. ('O' and 'A' level) courses and related servicing; and Foreign Languages, currently French, German and Spanish.

Applicants for both posts must have substantial experience of further education at the senior level. They should be appropriately qualified and be able to demonstrate the personal and management skills necessary to lead a large and varied Department effectively.

Salary scales (under review):
Head of Department Grade V, £16,098-£17,877
Grade IV, £14,799-£16,578
(Plus £1,038 Inner London Allowance).

Further details of both posts and forms of application may be obtained from the Principal South Thames College, Wandsworth High Street, London SW18 2PP (Tel. 01-870 2241, Ext. 301). Completed forms should be returned not later than 27th September, 1985.

ILEA IS AN EQUAL OPPORTUNITIES EMPLOYER (72061)



sandwell
Metropolitan Borough Council
An Equal Opportunity Employer

DEPARTMENT OF EDUCATION
PRINCIPAL
(GROUP 10)

It is proposed to merge West Bromwich College of Commerce and Technology (Group 8) and Warley College of Technology (Group 9) from 1st September 1986 to form a single new college to serve the Further and Higher Education needs of Sandwell.

Further details of this demanding but exciting post are available from the Director of Education and completed application forms should be returned to him by 30th September 1985.

Director of Education, P.O. Box 41, Highfields, High Street, West Bromwich, Sandwell, West Midlands, B70 8HA.

Canvassing of members of the authority will be disqualify. (72060)

Colleges and Institutes of Higher
Education

Applications are invited for the following posts in this Church of England Voluntary College of Higher Education (1800 men and women). The appointments will be at appropriate points on the Lecturer Grade II/Senior Lecturer scale £7,548-£14,061. The appointments will date from 1st January 1986.

LANGUAGE STUDIES AND LINGUISTICS

The successful candidate will have had a formal training in linguistics and will be expected to make a particular contribution in the area of language and education. Knowledge of the linguistics of a language other than English would also be welcome.

MATHEMATICAL EDUCATION

A well qualified person with recent teaching experience, preferably at primary school level is required. The successful candidate will contribute to initial teacher education (B.Ed. and P.G.C.E.) and to in-service work for teachers. An ability to teach academic courses in mathematics would be an advantage.

RELIGIOUS STUDIES

The successful candidate will contribute to Religious Studies and Religious Education courses in B.Ed. and B.A. degree programmes as well as at post-graduate level. Applicants must be good honours graduates with recent and successful school teaching experience.

Further details and application forms may be obtained from The Principal, College of Ripon & York St John, Lord Mayor's Walk, York YO3 7BX, to whom completed forms should be returned to arrive not later than MONDAY 30th September 1985.

vacancy
CLOSING DATE
28th SEPTEMBER 1985
RE-ADVERTISEMENT - PREVIOUS APPLICANTS NEED NOT RE-APPLY
SCHOOL OF TEACHING & COMMUNITY STUDIES
Department of Home & Household Studies
SENIOR LECTURER IN HOME ECONOMICS
- HOUSEHOLD SCIENCE/
CONSUMER TECHNOLOGY
This post is available from 1st January 1986.
Teaching will be across the full range of departmental courses including B.A. (Hons) Home and Community Studies and B.Ed. (Hons) Home Economics Secondary Specialism and further education courses in Home Economics.
A major responsibility will be to act as Development Co-ordinator within the Department. You should be well-qualified, have relevant research experience, and be able to work within a multi-disciplinary team.
Salary: £11,175 - £14,061 (award pending)
For further details and an application form, please contact:
Mr A W Hodgson, Staffing Officer,
Bradford & Ilkley Community College,
Great Horton Road, BRADFORD BD7 1AY
WE ARE AN EQUAL OPPORTUNITIES EMPLOYER.

NEWMAN and WESTHILL
LECTURER II/SENIOR LECTURER
IN MATHEMATICS (2 Posts)
The successful candidates will be expected to contribute to the teaching of the primary B.Ed. degree and PGCE courses across both colleges, and will have the opportunity to participate in in-service courses for teachers.
Candidates should have good qualifications in Mathematics or Mathematics Education and at least one appointee is to have recent primary school experience.
One post will be tenable at Newman College and a practising Catholic would be preferred; the other post will be at Westhill, preferably for a person in sympathy with the aims of this Christian foundation.
It is hoped that one of the lecturers appointed will be able to make a contribution to the teaching of Physical Science.
Further information obtainable from the Principal of either college.
Closing date for applications: 30th September 1985.
Newman College
Genners Lane
Bartley Green
BIRMINGHAM
B32 9NT
Westhill College
Weoley Park Road
Belly Oak
BIRMINGHAM
B29 6LL
Affiliated Colleges of the
University of Birmingham

WEST MIDLANDS
COLLEGE OF HIGHER
EDUCATION
THE FOLLOWING TEACHER EDUCATION APPOINTMENTS ARE
REQUIRED FOR 1ST JANUARY 1986, OR AS SOON AS POSSIBLE
THEREAFTER:
1. Course Leader (Principal Lecturer), initial BEd Primary Honours Degree.
2. Senior Lecturer to co-ordinate Language Across the Curriculum.
3. Senior Lecturer to co-ordinate Multi-Cultural Education.
4. Senior Lecturer to co-ordinate Special Educational Needs.
5. Lecturer II/Senior Lecturer in Two-Dimensional Art and Design.
Candidates must have graduate qualifications and should possess primary teaching experience and appropriate research interests. The close association of West Midlands College with The Polytechnic, Wolverhampton, including planning of joint initial and in-service courses, will establish a major centre of Teacher Education in the West Midlands.
Application forms and further particulars are available from:
The Principal,
West Midlands College of Higher Education,
Gorwey, Walsall, W13 5BD
to whom completed forms should be returned by 2nd October 1985.

Cambridgeshire
College
of Arts and Technology
(equal opportunities employer)
LECTURER II
SENIOR LECTURER
IN MECHANICAL/
PRODUCTION
ENGINEERING
(Re-advertisement - previous applicants should be considered if they still wish to be considered)
Required to teach Mechanical and/or Production Engineering subjects on B/TEC National and Higher National Certificate/Diploma Courses. Candidates should hold an appropriate degree or equivalent qualification. CAD/CAM and/or computer experience would be an advantage.
Salary: £11,175 - £14,061 (award pending), plus London Allowance and other benefits.
Details and forms to be returned to: Mr R. G. Bennett, Head of Department of Engineering, C.C.A., 1st Floor, Road, Cambridge, CB2 3RQ.

Colleges and Institutes
of Higher Education continued

SOUTH GLAMORGAN COUNTY COUNCIL
South Glamorgan Institute of Higher Education
Faculty of Education
DEPARTMENT OF ART EDUCATION
Applications are invited from suitably qualified and experienced candidates for the post of
LECTURER GRADE 2:
BA (Hons) ART EDUCATION STUDIES
POST NO. L2/116
from 1 January 1986.
The successful applicant will be required to teach on the BA (Hons) Art Education Studies Course with special reference to Screen Printing, Etching, Photography, Film and Video, or any combination of these areas and will be expected to contribute to the teaching programme on the historical/theoretical dimensions of these subjects.
Salary: £7,548 - £14,061, subject to the minimum F.E. Salary Document rules of progression; placing on L2 Salary Scale dependent on qualifications and experience.
(Pay award pending).
Further particulars and application forms may be obtained from The Personnel Officer, South Glamorgan Institute of Higher Education, Gwynedd Centre, Gwynedd Road, Cardiff CF1 6XD Telephone: Cardiff (0222) 861111, Ext. 3382. Completed application forms should be returned within fourteen days of the date of the publication of this advertisement. (72072)

King Alfred's College
Winchester
LECTURER IN
RELIGIOUS
STUDIES
WITH
PROFESSIONAL
STUDIES
Applications are invited from well qualified graduates for a lectureship in Religious Studies with Professional Studies. The successful candidate will have a degree in the area of World Religions and/or Philosophy of Religion, and will also contribute to professional work in the area of courses dealing with broad philosophical issues in Teacher Education. Applicants will preferably have recent Primary/Middle School experience. This post is to be filled from 1st January 1986.
A higher degree or recent research in an appropriate field will be an advantage. The college offers a programme of postgraduate study in BA and BEd degrees, the Dip in Service awards, and a series of in-service awards. The successful applicant will contribute to the areas of both initial and in-service teacher training.
Salary: Lecturer II/Senior Lecturer £11,175 - £14,061 (under review).
Further particulars from: The Principal, King Alfred's College, Winchester, Hampshire, to whom applications should be sent by 30th September 1985. 118

Christ Church College
of Higher Education
Canterbury
RESEARCH FELLOW
(Technical and Vocational Education Initiative Evaluation)
The College has been commissioned to undertake the independent evaluation of the TVET projects in Canterbury, Bromley and Bexley, and wishes to appoint a Research Fellow for a period of five years and from January 1986 for this purpose. Applicants should be graduates and preferably have a successful record of teaching in a secondary school. Experience of monitoring or evaluation in an area of the secondary curriculum is desirable.
The salary is within the range £7,548 - £12,095 p.a. (under review).
For further details write to: Mrs. Joan Long, Personnel Assistant to the Principal, Christ Church College, Canterbury, Kent, to whom a stamped addressed envelope, in which applications should be sent, must be sent by 30 September. (51690) 118

FOR DETAILS OF
ADVERTISING IN
THE THES PLEASE
RING SUE PEPLOE
ON 01-253 3000
EXTN 206

Independent Colleges

HABERDASHERS' MONMOUTH
SCHOOL FOR GIRLS
APPOINTMENT OF
HEAD
The school is an independent day and boarding school, with an established record of academic excellence.
Applications are invited for the post of Head which will fall vacant on September 1st 1986. The school has approximately 600 girls aged 7-18 years and is endowed and administered by the Worshipful Company of Haberdashers.
Further details may be obtained from the Bursar, Haberdashers' Monmouth School for Girls, Hereford Road, Monmouth, Gwent NP5 3XT, to whom applications should be sent by October 7th, 1985. (02076)

Selly Oak Colleges
will appoint from September
DIRECTOR
CROSS-CULTURAL
COMMUNICATIONS
CENTRE
Low-tech, person-centred training of adults from different cultures.
Church-related negotiable salary.
Closing date: 1st November 1985.
Further details from: Chief Administrative Officer, Selly Oak Colleges, Birmingham B29 6LQ. (51719)

PLEASE
MENTION THE
T.H.E.S.
when replying
to advertisements

Independent Colleges continued

Director of Studies
£21,000 plus
You will be responsible for directing the work of some 27 Lecturers in the Departments of Science, Engineering Science, Mathematics, History (Strategic Studies and Economics) and Languages. You will have overall responsibility for the academic work of some 500 young officers in residence at Dartmouth, and for the selection of officers for university degree courses.
You should be a graduate, preferably in the 35-55 age range and be broadly based as an educationalist with considerable experience at secondary or tertiary level. You should have good contacts with schools and universities and must have intellectual and personal qualities which will command the respect of students and staff at BRNC and of Senior Service Officers.
Experience of, or affinity for, the Navy would be an asset.
Staff play a full and active part in all College activities.
The post is permanent and pensionable and will be available in August 1986, when the present incumbent retires. A detached residence (Ashford House) will be available at an economic rent.
For further details and an application form (to be returned by 4 October 1985) write to: Civil Service Commission, Alencon Link, Basingstoke, Hants, RG21 1JB, or telephone Basingstoke (0256) 464551 (answering service operates outside office hours). Please quote ref G/6628.
The Civil Service is an equal opportunity employer.

Britannia Royal Naval College, Dartmouth

Applications are invited for the post of
PRINCIPAL
of SPURGEON'S COLLEGE
The College trains candidates for the Baptist Ministry and offers C.N.A.A. validated B.A. and B.A. Honours degrees in Theology.
The successful applicant will be required to exercise spiritual leadership in the developing life of the College.
Applications close 8th November 1985.
Further details from the Secretary, Spurgeon's College, 189 South Norwood Hill, London, SE26 6DJ.

Research and Studentships continued

South Bank Polytechnic
Lifestyle Research Unit
RESEARCH FELLOW
Ref: RA68
To take senior responsibility in a new large scale project designed to assist the development of research and consultancy. The successful candidate should have a good social sciences honours degree or research experience.
The post is for two years with an initial salary of £10,750.
RESEARCH ASSISTANT
(Part time 18/14 hours per week)
Ref: RA69
To work on a social sciences project. The post is for two years.
A COMMUNITY MOTIVATOR
Ref: RA70
To stimulate social participation in connection with the Bristol Recreation Centre amongst the young unemployed. Candidates should have a good social sciences honours degree, notably with community experience.
The post is for eighteen months with a salary of £9,500 inc.
Further details and application forms are available by writing to: The Personnel Officer, South Bank Polytechnic, Borough Road, London SE1 0AA.
Closing date: September 27th 1985.
An Equal Opportunities Employer. (51790) 118

The Polytechnic of North London
R22 RESEARCH LIAISON OFFICER
An energetic and highly motivated researcher is required to assist the development of research and consultancy. The successful candidate should have a good social sciences honours degree or research experience. The post is for two years with an initial salary of £10,750.
Initially the post-holder will spend some time investigating the various research-based activities at PNL, and co-ordinating project groups that will be established to improve the efficiency and effectiveness of research effort. Additionally s/he will be expected to make an imaginative contribution to the development of important links with industry and commerce as well as public and voluntary agencies. The post is available on a 21 month contract.
The Polytechnic of North London has developed a sound reputation as a provider of progressive education for an inner city community. We are an equal opportunities employer.
Applications are invited from persons who are enthusiastic, have proven ability and all round experience in different aspects of research work.
Salary: Researcher B: £7,548 - £10,351 plus London Allowance (pay award pending).
Application form and further information are obtainable from the Personnel Officer, The Polytechnic of North London, Holloway Road, London N7 7AT. Tel: 807 9788.
Closing date for the receipt of applications is 14 days from the date of publication of this advertisement.

Research and Studentships continued

UNIVERSITY COLLEGE OF SWANSEA
Research Assistant
Applications are invited for the post of Research Assistant in the Centre for Applied Social Studies, to work on a study of the effectiveness of alcohol advice services in West Glamorgan. Preference will be shown to candidates with relevant postgraduate research experience and an interest in the field of alcohol studies and/or the evaluation of welfare services.
The appointment will be for up to two years, at a commencing salary of up to £7,520 per annum.
Further particulars and application forms (2 copies) may be obtained from the Personnel Office, University College of Swansea, Singleton Park, Swansea, SA2 8PP, to which office they should be returned by Friday, 4 October, 1985. (72078)

University of Dundee
Department of Public Law
RESEARCH ASSISTANT
There is a vacancy available for a research assistant to work full-time with Mr P. Q. Wattman in the Department of Public Law, University of Dundee, on a full-time project on the use of criminal law in enforcing regulatory codes.
At this stage the post will be for the period October 1985 to September 1986 but there is the prospect that this period may be extended.
The successful applicant will be paid at the appropriate point within the range £5,600 to £7,520 (under review).
Prospective applicants require additional information before deciding whether to apply may contact Mr Wattman at the Department of Public Law, Tel: Dundee (0382) 53161, Ext. 635.
Applications including full career details and the names of two referees, should be lodged by 4th October 1985 with the Personnel Office, The University of Dundee, 435N. Please quote reference 857/8/85.T.H. (51811) 112

The Polytechnic of North London
R27 RESEARCH ASSISTANT
Department of Teaching Studies
Research Assistant required for October or as soon as possible thereafter.
The post is new project being developed by PNL and the Institute of Educational Research (IER) with regard to Primary and Secondary Education. It involves engaging parents in their own work of their young children. The Research Assistant will be responsible for evaluating and charting the progress of the scheme. If a suitable person is identified it is hoped that they will contribute to the development of the scheme.
Up to six hours per week teaching in the Department may be required. Suitable candidates will have some knowledge of PNL and further knowledge/experience of primary schools, either as a teacher or a parent (1 year post).
Salary: £5,181 - £5,910 + London Allowance £1,038.
Application form and further information are obtainable from the Personnel Officer, The Polytechnic of North London, Holloway Road, London N7 7AT. Tel: 807 9788.
Closing date for the receipt of applications is 14 days from the date of publication of this advertisement.

The Polytechnic of North London is an equal opportunities employer. (51805) 112

Research and Studentships continued

TEESSIDE
POLYTECHNIC
PRIME
RESEARCH
CONTRACTLecturer II or
Senior Lecturer and
Research Assistant

The Department of Computer Science has recently been awarded a 3 year research contract by Prime Computers Ltd to develop an Expert System interface to the PRIMOS Operating System. A Lecturer is required to undertake a series of the lecturing duties of the staff involved in this project, though it is expected that the successful applicant will join the research team as well. A background in Artificial Intelligence, particularly in Expert Systems or Natural Language, will therefore be an advantage, though lack of this should not deter prospective applicants.

The Research Assistant should have a good Honours Degree or a Higher Degree in Computer Science. A graduate applicant will be expected to register for a Higher Degree. An appointment on the Lecturer II scale is available for post-doctoral applicants.

Salary:
Research Assistant
£6,910-£8,857 per annum
Lecturer II
£7,548-£8,463 per annum
Senior Lecturer
£11,175-£12,999 per annum
Application forms and further particulars from the Personnel Section, Teesside Polytechnic, Borough Road, Middlesbrough, Cleveland TS1 3BA. Telephone: 0842 218121, Extension 4114.
Closing date for applications: 20 September 1985.
An Equal Opportunity Employer. (7206)

University of
Bath
School of Materials Science
Surface Scientist for Rubber-
Metal Interface Studies
related to Mold Release

Applications are invited for a

**POST-DOCTORAL
RESEARCH OFFICER**
from candidates with experience of modern methods of surface analysis, to join a project studying the influence of surface energy and interfacial adhesion on the release of rubber mouldings. The research is funded by the Polymer Engineering Directorate of the S.E.R.C. for three years.

The successful candidate will use techniques such as X.P.S., rheological testing to improve the understanding of the factors which control the release of mouldings in rubber technology. The position with the rubber processing industry will be involved.

Starting salary up to £9,450 p.a. according to age and experience.
Application forms and further details from the Personnel Section, University of Bath, Bath BA1 7AY, England, ref no. 85/155. Closing date: 27.9.85. (1715)

The University of
Manchester
Department of Science and
Technology Policy
RESEARCH
ASSOCIATE/
ASSISTANT

Applications are invited for a post which will be concerned with the history of Engineering and is available for one year from Autumn 1986. The project 'Between Science and Industry: Academic Engineering in the 19th Century Britain' is a joint initiative of the University of Manchester and the Science Museum. Candidates must have extensive knowledge of the history of engineering and/or of the physical sciences. A desirable.

Starting salary on a range from £8,980 p.a. Superannuation.
Further particulars and application forms (returnable by 10 October 1985) from The Registrar, The University, Manchester, M13 9PL.

University of
Dundee
RESEARCH
IN SCATTERING
THEORY

Applications are invited for a postdoctoral research fellow to undertake theoretical investigations in the scattering of waves. Applicants should have appropriate qualifications in Physics or Engineering. The appointment is for three years and will start from 1 January 1986.

Initial salary £7,980 per annum, superannuation under USS or continuation of USS.

University of
Newcastle upon Tyne
ASSOCIATED LEAD
MANUFACTURERS
LIMITED
STUDENTSHIP

Applications are invited from graduates or the holders of equivalent qualifications for the above studentship to carry out research in the field of science or engineering.

The studentship will be valued at the amount of £2,565 with remission of fees. Holders are required to register for a Higher Degree. Awards are normally for 3 years, subject to confirmation at the end of the 2nd year.

Further details and application forms, which must be returned no later than 30th September 1985, can be obtained from The Registrar (Education), The University of Newcastle upon Tyne, NE1 7RU. (51751)

Industry and Commerce

Technology can
lead to a patent
opportunity

Our Patent Operations group in Winchester monitors all aspects of new technology originating at our Hursley development laboratories, in IBM United Kingdom Limited and in assigned US locations. Because of our commitment to developing and improving the newest technology, the task involves identifying innovation, securing the company's position through patents, trade names and copyrights, and resolving third-party rights.

We're now looking for two exceptional people to join the team as trainee patent attorneys. You'll have graduated in a scientific or engineering discipline - electrical or electronic engineering, computer science, physics or maybe mathematics - and you'll combine that technical bent with a keen attention to detail and a strong commercial or business interest.

We will provide training towards the examinations of the Chartered Institute of Patent Agents and the European Patent Institute. Applicants will need the ability to qualify in the legal aspects of the work, and because of the international nature of the qualification, a reading knowledge of French or German will be necessary.

Salaries both during and after training are highly competitive, and will be supported by a wide range of benefits including contributory pension scheme, free life assurance and BUPA membership.

Interested applicants with the necessary qualifications should write for an application form to: Lindsey Baker, IBM United Kingdom Limited, PO Box 41, North Harbour, Portsmouth, Hants. PO6 3AU. Please quote reference TE/078



- 17,000 jobs in over 40 UK locations
- The manufacturing plants
- Development laboratory near Winchester
- An equal opportunity employer
- £1,175 million invested in UK in 1984



Courses

DUNDEE COLLEGE
OF TECHNOLOGY

Applications are invited for the untened posts, some of which arise from a government-supported programme of expansion aimed at increasing the output of graduates in the new technologies from the Scottish Central Institutions.

DEPARTMENT OF ELECTRICAL & ELECTRONIC ENGINEERING
Senior Lectureship/Lectureships in Digital Systems or Software Engineering or Power Engineering or CAE or VLSI Design (3 posts)
Candidates should be suitably qualified and experienced in electronic/electrical engineering or a related discipline.

DEPARTMENT OF ACCOUNTANCY & ECONOMICS
Senior Lectureship in Economics
Teaching experience at first degree level and achievements in research are necessary requirements. Experience of supervising research students would be an advantage.

DEPARTMENT OF MATHEMATICS & COMPUTER STUDIES
Senior Lectureship/Lectureships in Information Technology (2 posts)
Candidates should be suitably qualified and experienced in one or more of office automation, systems analysis & design, distributed systems, network technologies, man-machine interfaces, and artificial intelligence.

Lectureships in Computing (2 posts)
A specialist interest in data processing, software engineering or systems programming would be an advantage.

Lectureship in Mathematics
A specialist interest in control theory, mathematical modelling or differential equations would be an advantage.

Lectureship in Statistics
A specialist interest in time series, multivariate analysis, statistical computing or econometric modelling would be an advantage.

DEPARTMENT OF PHYSICS
Lectureship in Physics
A specialist interest in digital electronics, microprocessors or the use of computers in the teaching of physics would be an advantage.

For all posts, applicants should have a good first degree and preferably a higher degree, and they should also have relevant industrial and/or research experience. The successful candidates will be required to teach on a range of postgraduate, degree and other courses, and will be expected to undertake research and/or consultancy. The Senior Lectureship appointments will be expected to play a leadership role, and candidates for these posts must have appropriate experience.

Salary Scales (currently under review):
Senior Lectureship £12,777-£16,104
Lectureship £8,980-£12,716
In all cases, initial pricing will depend upon approved experience and financial assistance towards the cost of removal expenses may be payable.

Further particulars and application forms may be obtained from the Personnel Officer, Dundee College of Technology, Bell Street, Dundee, DD1 1HG, with whom applications should be lodged not later than 3 October 1985. (70502)

Royal Northern
College of Music
1986 Entry

Applications are invited for entry in 1986. The closing date for receipt of applications is 31 October 1985. Auditions for undergraduates will be held mainly in October 1985.

Details and application forms are available from the Secretary for Admissions, RNCM.

Preview Days for Teachers, Prospective Students and Parents:
Wednesday 2 October, 9.30 (All Instruments, Voice, Composition and Academic Studies); Sunday 13 October, 9.30 (Wind and Percussion); Sunday 27 October, 9.30 (String and Woodwind).

An opportunity to meet members of the teaching staff for advice on auditions, courses, facilities and careers, plus visits to rehearsal and tour of the building.

Admission by invitation, ticket only, available from the Promotions Department, RNCM.

Royal Northern College of Music, 124 Oxford Road, Manchester, Tel: 061 275 6885. (51766)

PLEASE
MENTION THE
T.H.E.S.

when replying
to advertisements

University of London

GOLDSMITHS' COLLEGE

Research in the Social Sciences

The college's Postgraduate Prospectus contains details of research in the following subjects, available for entry to the degree of MPhil and PhD in October 1986:

Psychology
Social Anthropology
Social Administration
Sociology

All degrees are available by either full-time or part-time study, and an upper second class first degree in the subject is normally required for entry.

Full details and application forms (please state course) are available from the Admissions Officer, University of London, Goldsmiths' College, London SE14 8NW (01-892 7171).

Colleges and Departments of Art

EPSOM SCHOOL OF
ART AND DESIGN

Applications are invited for the post of

HEAD OF DEPARTMENT
COMMUNICATION DESIGN

The Department currently offers two B/TEC National Diploma Courses in Graphic Design and Audio Visual Design, and a B/TEC Higher National Diploma Course in Graphic Design.

There is a strong interest in Computer Aided Design in all courses.

Applicants should have good professional design and educational management experience at an appropriate senior level.

Salary: Burnham Head of Department Grade IV £15,083-£16,842 (inclusive of Surrey Allowance). Further particulars and application forms from:

The Chief Administrative Officer, Epsom School of Art and Design, Ashley Road, Epsom, Surrey KT18 5BE. (Tel: Epsom 28811)

Colleges and Departments of Art
continuedLONDON
CONTEMPORARY
DANCE
SCHOOLrequires an
ASSISTANT
PRINCIPAL

to be responsible to the Principal for administration and academic coordination. The school offers a variety of courses, including a degree course, and is the leading centre for the training of professional dancers in Europe.

For further details apply to: The Principal, LDCS, 18 Roman Terrace, LONDON, WC1H 8AT. Phone: 01-387 0811 x 30. Closing date for applications Monday 30 September 1985. (70610)

Secondary Education



THE HEAD OF HAILEYBURY

The Governors of Haileybury invite applications for the post of Head, which will fall vacant in April 1986, in succession to Mr. D.M. Summerscale, M.A. who is to become Head of Westminster School. Further particulars of the appointment may be obtained from the Secretary to the Council, Haileybury, Hertford, Herts SG13 7NU, to whom applications, including a summary information form to be provided by the Secretary, should be sent not later than 12th October 1985.

International
University High School
American High School
requires immediately a qualified
US HISTORY AND
US GOVERNMENT
TEACHER

to live in boys boarding department. Accommodation available for complex full time children.

Salary: £6,500 plus room and board.

Send cv to: Mr R. Schaub, Headmaster, International University High School, The Avenue, Bushy Park, WY2 2LW. Tel: 0953 49067. (51792)

Administration

REMINDER
COPY FOR
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THE
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PUBLICATION

PRINCIPAL ASSISTANT
FURTHER EDUCATION
OFFICER

Salary: Grade POK £18,297 to £19,425 p.a. inclusive

This new post has been created by the re-organisation of the top management structure of the Further Education Dept., aimed at placing the professional responsibility for institutions and services, including the Adult Education, Youth and Community sectors and the Authority's Careers Service under this senior professional post.

The post holder will be responsible to the Chief Further Education Officer for policy formulation, management and development, and in conjunction with the Assistant Further Education (Finance and Administration) and the Further and Higher Education Adviser, will be expected to make a contribution to the general management of the Department.

Applicants should be suitably qualified and experienced with a proven record of achievement in resource management. A commitment to service provision based on effective financial controls is essential.

Application form and further details available from: Educational Services Secretary, Education Directorate, Town Hall, Crawley, Kent DA1 4E* (Tel: 01-303 7777 Ext. 542/543). Closing date 30th September, 1985. (70609)

Bexley London
Borough

ilea Inner London
Education AuthorityEducation Officer: William H. Stubbs
Chief Inspector:
David H. Hargreaves

These posts are available because of promotions and retirements and recent important changes in the structure of the Inspectorate.

In May 1986 the ILA will become the first directly elected Education Authority. These posts provide opportunities to contribute to the development of education in Inner London as part of an experienced team of some 140 professional educationalists. Candidates of the highest calibre are now sought for the following posts, some of which are new. Applicants must demonstrate a thorough understanding of education practice and have a commitment to the Authority's policies on equality of opportunity (race, sex, and class).

Applications from employees of the GLC or MCCs with relevant experience will be welcome.

Staff Inspector
(English)

To lead and co-ordinate the work of a vigorous and imaginative team of Specialist Inspectors, Wardens and Advisory Teachers. She or he will be responsible for developing all aspects of English in the Authority's Schools and will also advise as necessary in respect of establishments of higher and further education.

Applicants should have good academic qualifications, substantial experience in teaching and advisory work and an extensive knowledge of recent developments in the subject.

Staff Inspector for
Careers Education
& Guidance

To lead a team to advise upon and inspect all aspects of careers education in secondary schools, special schools and colleges of further and higher education.

Applicants should have appropriate academic qualifications together with substantial relevant experience as a careers adviser/teacher/lecturer/officer.

Staff Inspector for
Science and
Technology in
Further and Higher
Education

To inspect, advise upon and to co-ordinate the work of specialist inspectors in construction, engineering, physical/biological sciences, and the new technologies, in the post-school sector. The person appointed will contribute as a specialist in one of these fields.

Staff Inspector for
Business Education

To inspect and advise upon business education and to co-ordinate the work of three inspectors for business education in the Authority's schools, colleges and polytechnics. The person appointed will contribute as a specialist in one of the main fields of business, law, and management education.

Salary range for the above Staff Inspector posts: £21,540-£23,358 Plus £1,494 London Weighting Allowance

Inspector for Business
Education
(District Rank)

To inspect and advise on business education and related studies in schools, colleges and polytechnics. Wide experience of the field and a particular interest in the applications of microtechnology are required.

Inspector for
General Education in
Further, Higher and
Community Education
(District Rank)

To inspect and advise on a wide range of general and vocational courses in the Authority's Further Education Colleges. Knowledge of MSC/YTS developments and of provision in further and adult education for the disadvantaged and those with special educational needs is required. Applicants should have a record of curriculum innovation.

Salary range for the above District Rank posts: £19,884-£21,540 Plus £1,494 London Weighting Allowance

Application forms and further details are available from the Personnel Services Division (EO/Estab 1B), Room 366, County Hall, London SE1 7PB. Please indicate clearly which post(s) you are interested in. Please enclose an SAE.

Closing date for the return of completed application forms is 27 September 1985.

Posts suitable for job sharing unless otherwise stated. ILA IS AN EQUAL OPPORTUNITY EMPLOYER

Department of Education and Science
HM INSPECTORS OF
SCHOOLS

English as a second language
(Reference 15/85)

Applications are invited from men and women, preferably aged between 35 and 45, for appointment in England as HM Inspectors. HMI inspect educational institutions as part of both general and specialist assignments and provide advice to the Department and throughout the education system.

Applicants will be expected to have had substantial teaching experience and involvement in developing methods and approaches to teaching English as a second language within the school curriculum and in the classroom.

They should also have recent experience of working in this country in or with schools serving multi-ethnic populations.

Starting salary for all posts is within the range £17,000-£22,900. Relocation expenses of up to £5,000 may be payable.

Application forms (to be returned not later than 30 September 1985) and further information may be obtained from Mrs S. Willis, Department of Education and Science, 35 York Road, London SE1 7PH. Telephone: 01-634 0798/0799/0800.

The Civil Service is an equal opportunity employer. (72048)

Principal Officer
(Colleges)

£13,965-£14,682

The main duties of the post relate to the administration of the county's further education colleges and to the organisation of 16/19 education.

Candidates require administrative and preferably some teaching experience.

Further details and application form from the Head of Manpower Services, County Hall, Kingston upon Thames, Surrey KT1 2DM. Tel 01-541 1765. Ref no MSD/1/85. Closing date 27 September 1985.

SURREY
COUNTY COUNCILEnglish National
Board
for Nursing, Midwifery and
Health Visiting

**EDUCATION
OFFICER
(DISTRICT NURSE
EDUCATION
AND TRAINING)**
Applications are invited for the above post, to be based in London.

The Education Officer is responsible for advising and formally visiting institutions approved to conduct courses in District Nurse Education and Training in a given geographical area.

The successful candidate must have a qualification comparable with the UKCC as a District Nurse and have had experience in a senior position in an institution conducting courses leading to the District Nurse qualification.

Salary Scale: Administrative and Clerical Staff (Nursing Council Scale 24).
£12,642 - £16,024 p.a. (under review).

An opportunity to discuss this post can be arranged by contacting Miss B. Robottom (Professional Officer, District Nurse Education and Training). Tel: 01-388 3131. Ext. 173.

For further details and application forms please contact the Personnel Officer, English National Board for Nursing, Midwifery and Health Visiting, Victoria House, 170 Tottenham Court Road, London W1P 0L. Tel: 01-388 3131, Ext. 256.

Closing date for receipt of applications: Friday 27th September 1985. (51757) 515

Overseas

University of
Cape Town
SENIOR LECTURER/
STUDIOMASTER AND
LECTURER/
STUDIOMASTER

In the School of Architecture
Applications are invited for the above presently vacant posts.

Candidates should be experienced in the design and practice of Architecture for building and planning and have had experience in a senior position in an institution conducting courses leading to the District Nurse qualification.

In the Architecture programme teaching competence in one or more of the following areas is required: Architectural Design (Studio work); Design Theory; History of Architecture; Construction Technology; Development Issues; Architectural Practice; Planning and Urban Design; Documentation; and Preference will be given to applicants with experience in the teaching of construction technology.

Salary ranges: Senior Lecturer/Studiomaster: R26,403 - R32,745 per annum; Lecturer/Studiomaster: R18,567 - R26,403 per annum plus an annual bonus and attractive staff benefits.

Applicants should submit a full curriculum vitae and the names and addresses of three referees not later than 31 October 1985 to the Registrar, Attention: Appointments Office, 128, University of Cape Town, Private Bag, Rondebosch, 7700, University of Cape Town. Further information may be obtained from the Registrar or the Secretary, SA Universities Office, 100 Victoria Road, High Holborn, London WC1V 7HE.

The University's policy is not to discriminate on the grounds of sex, race or religion. Further information on the implementation of this policy is obtainable on request (01-763) 214

Grants

Japan Foundation
Endowment Committee
GRANTS
FOR TEACHING
AND RESEARCH

The annual income from a donation made by the Japan Foundation is available for disbursement by the Committee established under the auspices of the JFC for the study and travel for teachers and administrators at all levels of the education profession. The current roster of members will be made available to new members upon registration. For more information, send an addressed envelope and a 10 x 5 inch photograph to: Exchange Center, 905 Virginia Ave., Suite 202, New York, N.Y. 10017. (212) 697-5332/5333. (51753) 514

Overseas continued



The Uniting Church
in Australia
Queensland Synod

Professor of New Testament Studies

Applications are invited from suitably qualified persons for the post of Professor of New Testament Studies within the newly formed Centre of Education for Ministries of the Queensland Synod of the Uniting Church in Australia.

The appointee will have oversight of the specialised area of New Testament Studies and will be involved in the training of ordinand and lay ministries in the Uniting Church. In addition, the appointee is expected to participate fully in the life of the Centre.

Full particulars are available from The Director, Department for Education and Communication, P.O. Box 1151, Milton, Queensland, 4064, Australia with whom applications close on 31 October, 1985. Phone enquiries: Professor Spykerboer (07) 870 8231.

THE LADY DAVIS FELLOWSHIP TRUST
P.O. Box 1255 Jerusalem 91904, Israel

FELLOWSHIPS FOR 1986-87 AT THE HEBREW UNIVERSITY OF JERUSALEM OR THE TECHNION-ISRAEL INSTITUTE OF TECHNOLOGY, HAIFA

GRADUATE AND POST-DOCTORAL FELLOWSHIPS

ELIGIBILITY: Lady Davis Fellows are selected on the basis of demonstrated excellence in their studies, promise of distinction in their chosen fields of specialization and qualities of mind, intellect and character.

APPLICATION INFORMATION: Graduate candidates may apply during their senior undergraduate year or after they have undertaken study in a graduate school. Post-doctoral candidates may apply not later than 3 years after completion of their doctoral dissertation.

The Fellowships are tenable for one academic year and may be extended for another year. The grant covers travel, tuition fees and reasonable living expenses.

VISITING PROFESSORSHIPS

are intended for candidates with the rank of Full or Associate Professor at their own institution. They are tenable from one semester to a full academic year.

DEADLINE: Completed forms in all categories must reach Jerusalem not later than December 1, 1985. Late applications will not be considered.

Candidates including Israelis abroad, may obtain application forms at the above address. Please indicate category of Fellowship required.



SOUTH AUSTRALIAN
INSTITUTE OF TECHNOLOGY

SCHOOL OF PHYSIOTHERAPY
Applications are invited for the position of:

LECTURER IN PHYSIOTHERAPY

(The appointment is available on a contract basis of up to three years in the first instance).

DUTIES: Mainly in the area of Kinesiology. The appointee will be responsible for coordination and teaching in the subject Kinesiology within the Bachelor of Applied Science in Physiotherapy. Additionally the successful applicant will be required to teach modules of advanced Kinesiology/Biomechanics in the Graduate Diploma in Advanced Manipulative Therapy and Physiotherapy.

QUALIFICATIONS: A degree in Physiotherapy recognizable for State registration purposes by the Physiotherapists' Board of South Australia. Broad professional experience, a postgraduate qualification in Kinesiology, Biomechanics or Ergonomics and some experience of clinical research is highly desirable. The successful applicant will be expected to commence duties in January 1986.

ANNUAL SALARY: Within the following range according to qualifications and experience: A\$28,236 to A\$34,487

Applicants not meeting the requirements for a lectureship may be offered a position in the Assistant Lecturer range \$22,514 to \$25,905.

Application forms, Conditions of Service and further information may be obtained from Mrs. Victoria Thomas, Appointments Officer, South Australian Institute of Technology, North Terrace, Adelaide, S.A. 5000, to whom applications, including the names and addresses of three referees should be forwarded as soon as possible.

(77000)

Applications are invited from suitably qualified persons for the following positions. You should be able to undertake and direct research and teaching in your particular field.

Chair of Architecture
Chair of Dramatic Art
Pure Mathematics – Senior Lecturer

Further information regarding the vacancy, salary and favourable employment package is available from South African Universities Office, Chichester House, 278 High Holborn, LONDON WC1V 7HE.

It is the policy of the University not to discriminate on the grounds of sex, race, colour or national origin.



UNIVERSITY OF
THE WITWATERSRAND

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ADVERTISEMENTS

Overseas continued

leiden
UNIVERSITY OF LEIDEN

Within the Faculty of Arts, in the Department of Languages and Cultures of South-East Asia and Oceania, there is a vacancy for a

professor of Indonesian and Malay language and literature (f/m)

vacancy number: 5-284/2570

The field is the study of Indonesian Language and literature, including Classical Malay and Malaysian.

The successful candidate will be entrusted with teaching and research in this field.

She/he should also be prepared to make a contribution to research projects which are outside her/his own specialization and to take part in the organization and implementation of projects of scholarly cooperation with Indonesia. She/he will furthermore be expected to assume administrative and organizational responsibilities.

Applicants should hold a doctorate and should have given evidence of competence and experience in the field concerned through their scholarly publications.

Within the Faculty of Arts, in the Department of Languages and Cultures of South-East Asia and Oceania, there is a vacancy for a

professor of Austronesian linguistics (f/m)

vacancy number: 5-285/2570

The University is seeking a candidate who is:

- a capable linguist with wide experience in both the descriptive and comparative-historical study of the Austronesian language-family;
- an experienced researcher, teacher and administrator;
- able and prepared to give instruction in at least two Austronesian languages;
- alongside teaching Austronesian linguistics, able and prepared to organize and implement cooperative projects with universities or other institutions in Indonesia or other countries where Austronesian languages are spoken.

The successful candidate will be entrusted both with teaching and with carrying out and supervising research within the field concerned.

She/he should also be willing to contribute to research projects outside her/his own specialization, and to engage in supporting activities such as instruction in elicitation and fieldwork techniques.

She/he will furthermore be expected to undertake administrative and organizational work.

Further information can be obtained from Professor J. J. Ras, Ruvenpleats 3, Postbus 9516, 2300 RA Leiden, tel. 071-148333 ext. 4580.

Candidates (and those who may wish to draw attention to other possible candidates) are invited to apply to the Dean, Faculty of Arts, c/o Faculty Bureau, Postbus 9516, 2300 Leiden, The Netherlands, within four weeks of the appearance of this advertisement.

Applications should be accompanied by a curriculum vitae, list of publication and a summary of current research.

REMINDER
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THE T.H.E.S.
SHOULD ARRIVE NOT
LATER THAN 10AM
MONDAY PRECEDING
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RMIT

1887 - 1987

ROYAL MELBOURNE INSTITUTE OF
TECHNOLOGY IN VICTORIA, AUSTRALIA
is seeking a new

DEAN

of the FACULTY OF HUMANITIES AND SOCIAL
SCIENCES IN ITS ADVANCED COLLEGE

RMIT is the largest multi-purpose post-secondary institution in Australia with a staff of 3,500 and an enrolment of 27,000 students. The Institute is organized into two colleges, a Technical College and an Advanced College. Tertiary education is offered by the Advanced College through six Faculties and a Graduate School of Management.

Following completion of his contract, the present Dean is returning to the USA, and the Faculty of Humanities and Social Sciences is now seeking a person to lead its future development.

The Faculty consists of three departments: HUMANITIES, LIBRARIANSHIP and SOCIAL SCIENCE and has 60 academic staff and 1,038 Equivalent Full-Time Students.

Applicants should have a higher degree and an established reputation in a discipline or professional area represented within the Faculty, have had extensive academic and professional experience and significant experience of tertiary teaching, including some at a senior level, which will enable him or her to provide academic and professional leadership to the Faculty.

Applicants should be able to demonstrate and articulate a commitment to the role of a Faculty of Humanities and Social Sciences in an Institute of Technology, especially in the context of RMIT's goals and directions and the Faculty's corporate plan and its strategic conception around the area of communication and information.

In addition, preferred applicants will have clearly demonstrated leadership ability and will be able to demonstrate successful administrative responsibility for a group of significant size. He or she will be able to deal with a diverse range of disciplines and vocational areas and will be able to demonstrate a capacity to contribute to the development of the Faculty's research strategy. Effective personal interaction and public presentation skills will be necessary, as will an ability to work in a particular manner towards and within a consensus regarding the basic goals of the Faculty.

The successful applicant will be offered a tenured position within the Institute as Head of School III and a term appointment as Dean at Head of School I for a period of five years with the possibility of further term appointments.

Current Annual Salary: (HOS II) A\$54,948
(HOS III) A\$51,185

For further information contact: Mr F. C. James, Acting Associate Director on 61 3 880 2002. Applications close: 8th November 1985.

A position description should be obtained from Personnel Services by phoning 61 3 880 2337 or telefax A\$3406 and quoting Reference No. 140/01/AN; written applications to Senior Appointments Officer.

RMIT Royal Melbourne Institute of Technology,
GPO Box 2476V, Melbourne, Victoria, Australia 3001.

(72059)

THE TIMES HIGHER EDUCATION SUPPLEMENT REPRINTS

Management Education

A six page special report, published in The T.H.E.S. on March 29, 1985.

The report looks at the future of management education and where the emphasis should be placed during the 1990s. The following are among questions discussed by contributors from the world of Management/Business Studies.

- 'Undergraduate business studies degrees, postgraduate MBAs for high fliers or continuing education for experienced managers?'
- 'What should be the relative contribution of the universities and the polytechnic, college sector?'

Copies available at 60p each*

Reviews of New Journals in the Humanities and Social Sciences

This eight page special number was published in The THES on June 21, 1985.

The following journals were reviewed: 'Contributions to Political Economy', 'Cities: the international journal on urban policy', 'European Sociological Review', 'Print Quarterly', 'Parliamentary History', 'Modern and Contemporary France', 'Catalyst: a journal of policy debate', 'Religion Today: a journal of contemporary religions', 'Anthropology Today', 'The British Journal of Sports History', 'Economic Modelling', 'Journal of Labor Economics', 'Portuguese Studies', 'The Quarterly Journal of Social Affairs', 'Modern Theology', 'The Quarterly Journal of Social Affairs', 'Modern Theology', 'The Yearbook of the British Pirandello Society', 'History and Anthropology', 'Economics of Education Review', plus a listing of journals received which may be reviewed at a later date. Copies available at 80p each.

Please make your cheques/postal orders payable to Times Newspapers Ltd and send to:

Francis Goddard,
The Times Higher Education Supplement,
Priory House,
St John's Lane,
London EC1M 4BX.

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The Times Higher Education Supplement

Special Book Numbers for 1985

OCTOBER
4 Environmental
Sciences (II)
11 History (II)
18 Maths and Physics (II)
25 Politics

NOVEMBER
1 Psychology (II)
8 Economics (II)
15 Biological Sciences (II)
22 Sociology (II)
29 Computer Studies (II)

DECEMBER
6 Education (II)

Reviews of New Journals
SEPTEMBER 27 Sciences
Special Features
NOVEMBER 1 Information Technology



Western Australian
Institute of Technology

Tenured Principal Lecturer
INFORMATION ENGINEERING
Data Communications; Computer Systems; VLSI
Salary \$48,397 (Aust) p.a.

Applications are invited from suitably qualified persons for the newly created position of Principal Lecturer in the School of Electrical and Electronic Engineering.

The successful applicant will be required to provide a strong leadership role in one of the following areas: VLSI design, computer systems or communication systems engineering. Responsibilities will include teaching at undergraduate and postgraduate level, personal R & D and inter-action with local industry.

Preference will be given to applicants with teaching experience, a record of scholarly achievement and a commitment to academic excellence. Applications close 31 October 1985. (Ref. 787A).

Tenured Senior Lecturer
HORTICULTURE
Salary range: \$35,203 - \$41,029 (Aust) p.a.

Co-ordinate and provide academic leadership in the Bachelor of Business (Horticulture) programme jointly offered by the School of Biology and Muresk Institute of Agriculture. The incumbent will be in a key position to develop the new course, which began in 1986, and to play a major role in a rapidly expanding industry.

Applicants require extensive experience in production horticulture, relevant academic qualifications (higher degree preferred) and be able to demonstrate an ability to liaise effectively with industrial organizations. Applications close 11 October 1985. (Ref. 814)

Conditions include leave for appointee and family plus assistance with removal expenses; superannuation.

Applicants' Details, including names and addresses of three referees should be submitted not later than the specified date to the Appointments Office, Western Australian Institute of Technology, Kent Street, Bentley, Western Australia, 6102. A brochure containing further information may be obtained by Tel. (08) 3083 or Cable (WANTECH) citing 'Appointments', position reference number and your return address.

*When applying please quote Ref. No. and Code HES.

York University
Faculty of Arts

ASSISTANT
PROFESSOR
PHILOSOPHY

Three-year contractually limited. Qualifications: Ph.D. or equivalent in Philosophy, teaching experience and publications. Main area of specialization: Ancient Philosophy but must have interest and demonstrated expertise in other areas of Philosophy as well. Duties: Undergraduate and graduate teaching and supervision. Appointment effective July 1, 1986, pending University approval. Applications, including curriculum vitae and at least three letters from academic referees should be sent to: Chairman, Department of Philosophy, York University, 4700 Keele St., North York, Ontario, Canada M3J 1P3. Application deadline: November 15, 1985. The advertisement is directed to Canadian citizens and permanent residents. (51777)

University of
The Witwatersrand

Pure Mathematics

Applications are invited for appointment as

SENIOR LECTURER

The successful applicant will be expected to engage in teaching and research in pure mathematics. Applications close on 15 November 1985, although late applications may be considered.

Salary: R23 016 - R31 456 per annum; Benefits: annual bonus, generous leave, pension, medical aid, remission of fees, sports facilities, housing subsidy, removal, travel and settling-in allowances (if eligible).

Further information contact Mr Geoff Remington, South African Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE.

The policy of the University is not to discriminate on grounds of race, sex, colour or national origin. (51758) R14

University of
The Witwatersrand

Dramatic Art

Applications are invited for appointment in the

**CHAIR OF
DRAMATIC ART**

from persons of proven academic standing and an attractive remuneration package.

Contact: Mr Geoff Remington, South African Universities Office, Chichester House, 278 High Holborn, London WC1V 7HE. Submit applications by 15 October 1985.

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